

MUSTEC

DVD-R100

MODEL

SERVICE MANUAL

Service Manual

DVD+RW Recorder System

CONTENTS	
SPECIFICATIONS	02
ADVANTAGES OF THISRODUCT.....	03
TROUBLE SHOOTING	04
WAVEFORMS	25
VOLTAGE CHARTS.....	28
CIRCUIT DIAGRAM.....	32
BLOCK DIAGRAM.....	46
PCB CIRCUIT BOARD.....	47
INSTRUMENT DISASSEMBLY.....	72

caution

Many electrical and mechanical parts in this chassis have special safety characteristics. These safety characteristics often pass unnoticed and the protection afforded by them can not necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by in the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire or other hazards.

SPECIFICATIONS

Power Supply	AC 110V~230V / 50~60Hz
Power Consumption	15~40W
TV Signal System	Standard PAL System
Laser	Semiconductor Laser,650nm
Operating Temperature	41~95
Operating Humidity	5%~85%
Operating Altitude	-305~3048m
Video Output Level	1V±0.2Vpp
DVD Record Media	DVD+RW,DVD-R
DVD Playback	DVD+RW , DVD+R , DVD-R Video Mode , DVD-RW Video , CD , CD-R , CD-RW , VCD , CD-DA(CD-Digital Audio) , SVCD(Super Video CD)
Signal Source	TV / CVBS / S-Video
Chapter Creation	Manually / Automatically
Audio Format	2 ch
Aspect Ratio	4:3 / 16:9 / Full Screen
Luminance Nonlinearity Distortion	≤ 5%
Luminance Wave Distortion (Pulse,Bar)	≤ 10%
Luminance S/N Ratio	≥ 60
Chrominance S/N Ratio	AM ≥ 60 , PM ≥ 55
Chrom Lum Time Delay (Pulse,Bar)	≤ 60ns
DGDP	≤ 5%
Video Recording Grade	1.691 / 2.537 / 3.382 / 5.073 / 9.716 Mbs

ADVANTAGES OF THIS PRODUCT

Playable Disc Formats

- DVD-Video
(single-sided/single-layer,single-sided/double-layer,double-sided/single-layer,double-sided/double-layer)
- DVD+RW , DVD+R , DVD-RW , DVD-R
- Video-CD (1.0,1.1&2.0) SVCD , CD-DA , Mixed CD-DA (which is mixed data and audio)
- DTS encoded Audio CD
- MP3 Audio CD (generated by CD-R or CD-RW)
- WMA Audio CD (generated by CD-R or CD-RW)
- JPEG file disc
- Kodak Picture disc
- DVCD disc

Feature

- Support upgrading mpeg f/w via CD-R/CD-RW

Recordable Disc

- DVD+RW , DVD+R

Playback Functions

- Normal Playback
- Pause/Step Forward(VCD,SVCD,DVD)
- Slow Forward/Reverse(VCD,SVCD,DVD)

Recording Function

- Real-time recording of live TV input
- Recording TV input at a given time and date
- Recording audio/video material from camcorder, analog VCR or other A/V source
- Simple video editing
- Create home-based DVD discs that can be played on existing DVD players

Search Functions

- Scan Forward/Reverse
- Skip Forward/Reverse

Navigation Functions

- Title Menu
- DVD Menu
- Changeable multilingual audio track
- Changeable multilingual subtitle and subtitle toggle
- Changeable multi-story, multi-angle, parental control

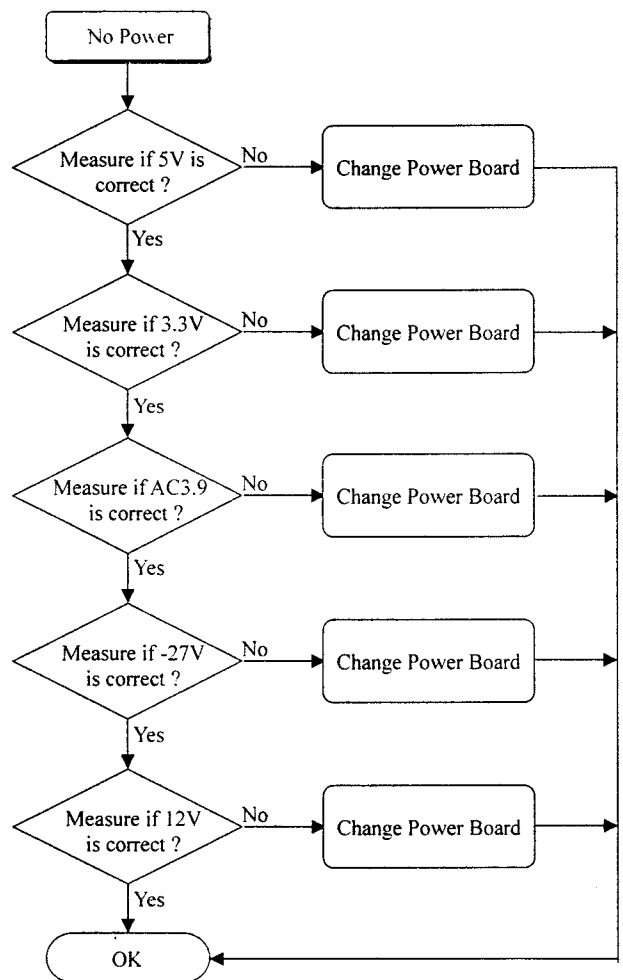
Program Playback Functions

- VCD 1.0, 1.1 & 2.0 without PBC, SVCD & CD-DA
- Maximum of 99 programmable tracks

TROUBLE SHOOTING

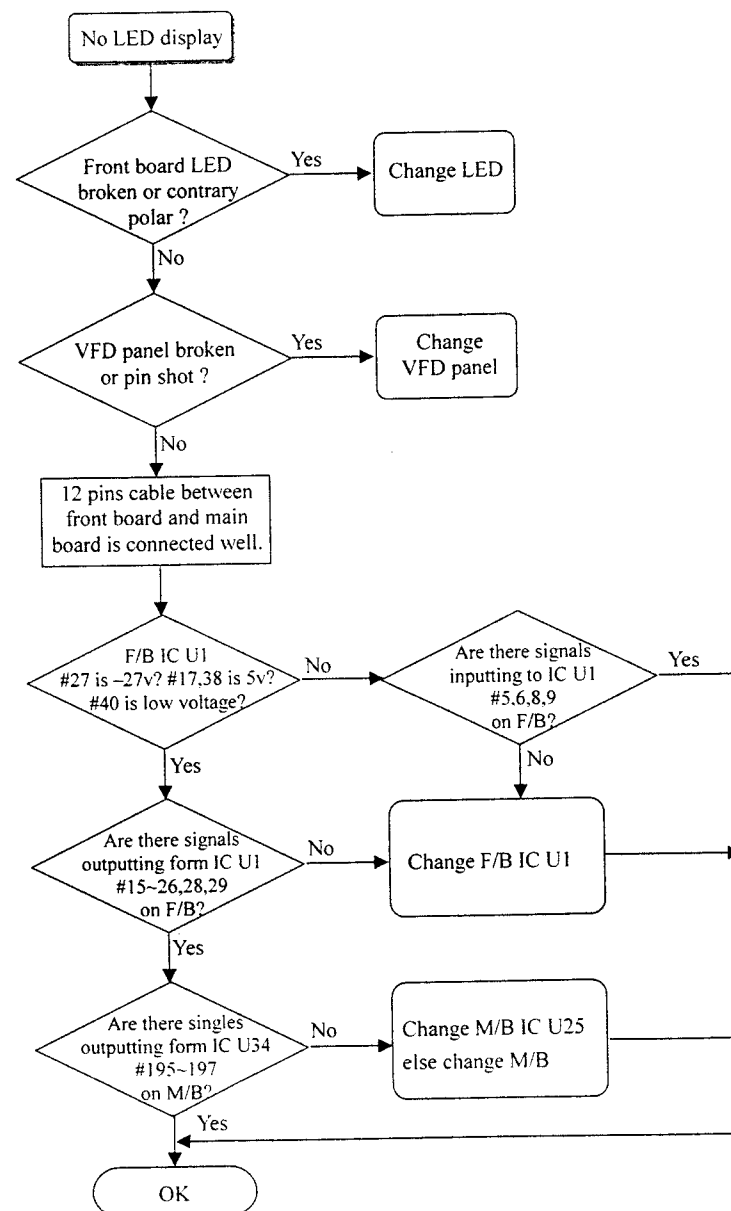
1. POWER TEST

A. Power Board Test



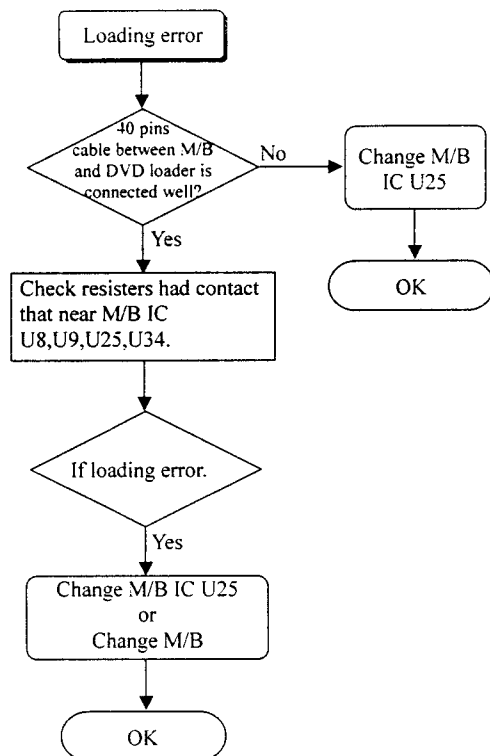
TROUBLE SHOOTING

B. Power LED or VFD panel error

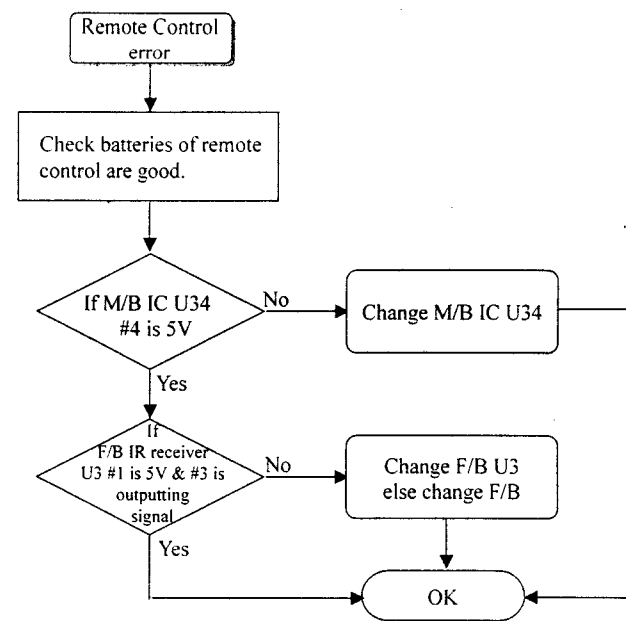


2. PLAYBACK TEST

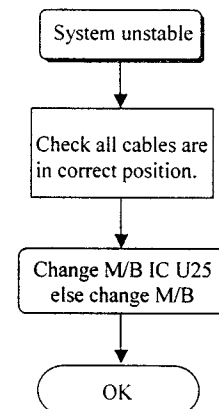
A. Loading Time Too Long



B. Remote Control Not Working Properly

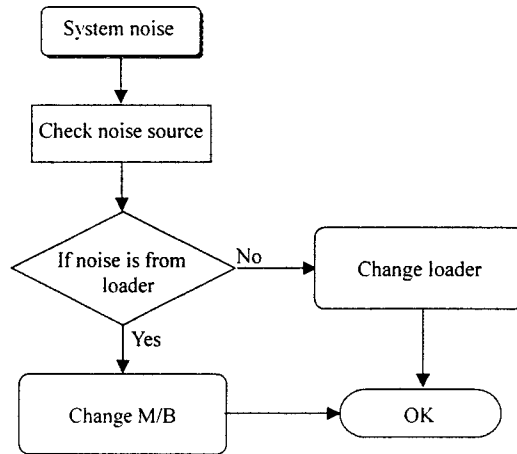


C. System hangs when power on or during playback

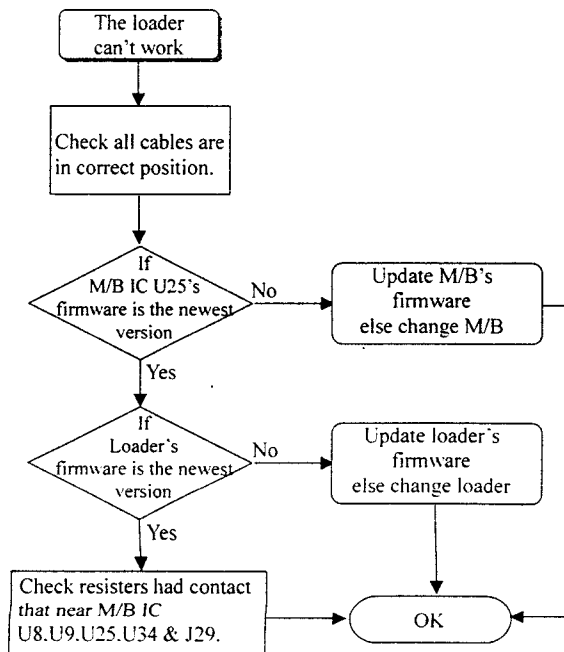


TROUBLE SHOOTING

D. Power on noise or noisy loader



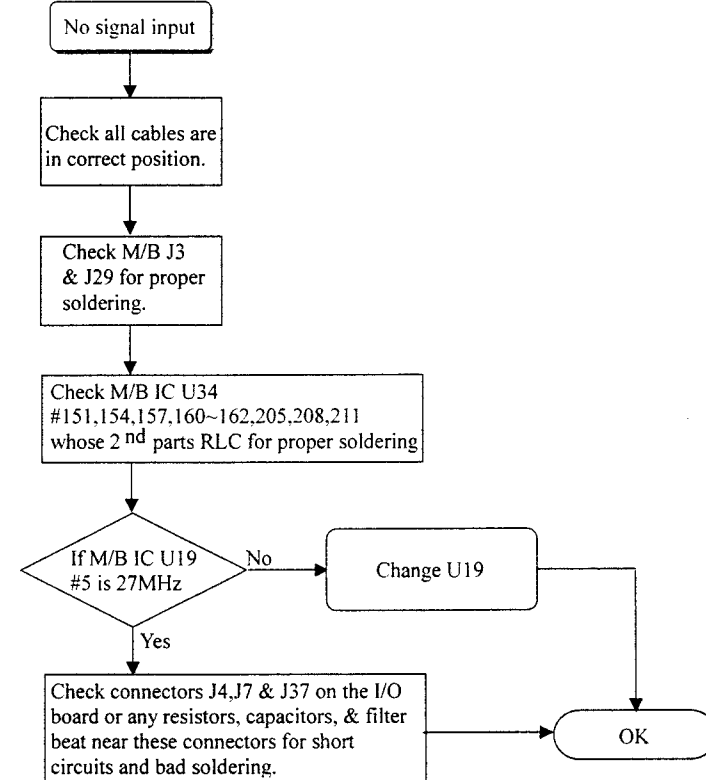
E. Reading DVD test discs N.G. or loader doesn't function, scratches disc or bad readability.



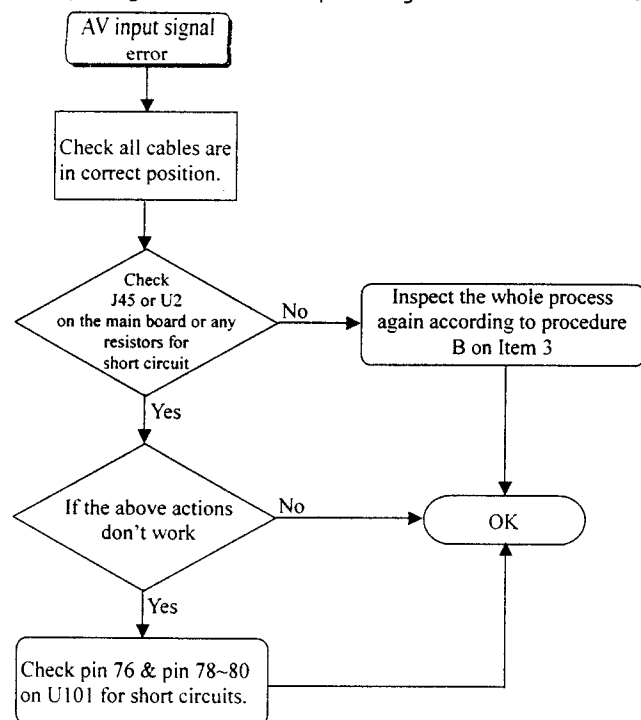
TROUBLE SHOOTING

3. VIDEO TEST

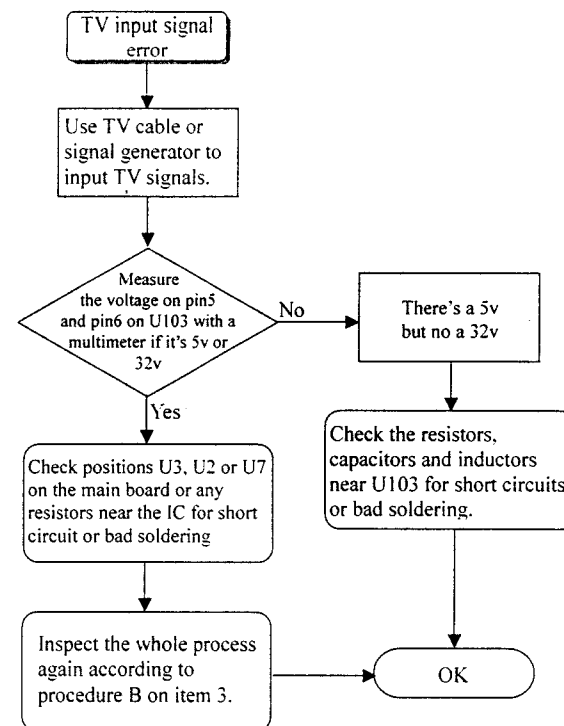
A. No signal input



B. AV input signal-no video output images or abnormal video output

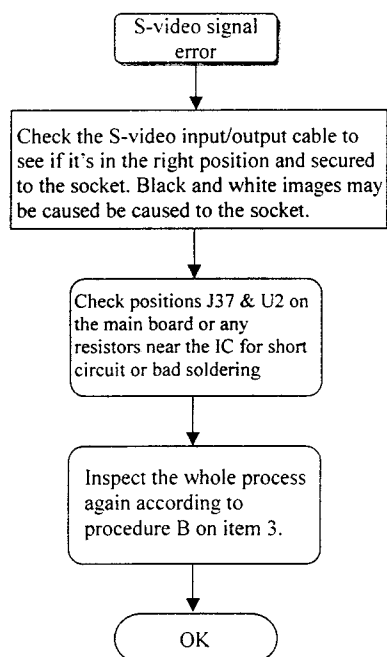


C. TV tuner input-no video output images or abnormal video output

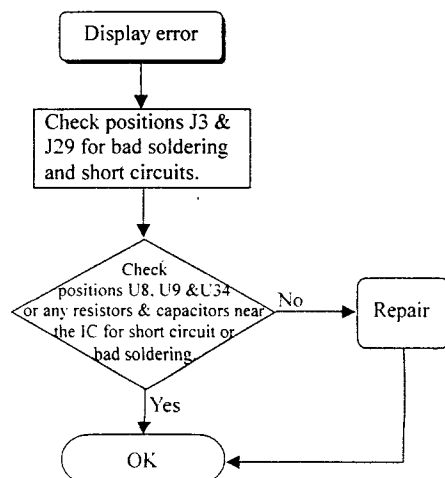


TROUBLE SHOOTING

D. S-video input-no video output or abnormal video output or black and white video



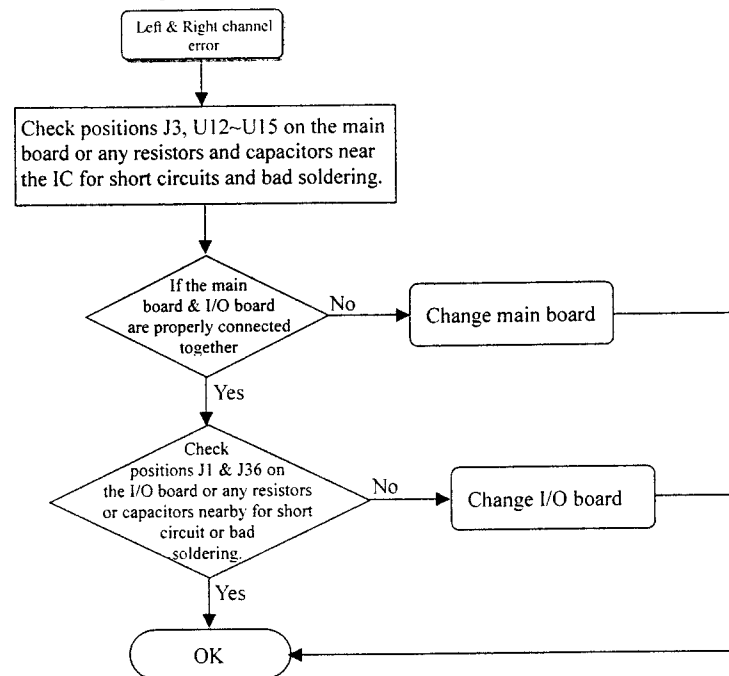
E. Abnormal VCD/DVD/NF-200 image or abnormal display of subtitle or abnormal menu selections display.



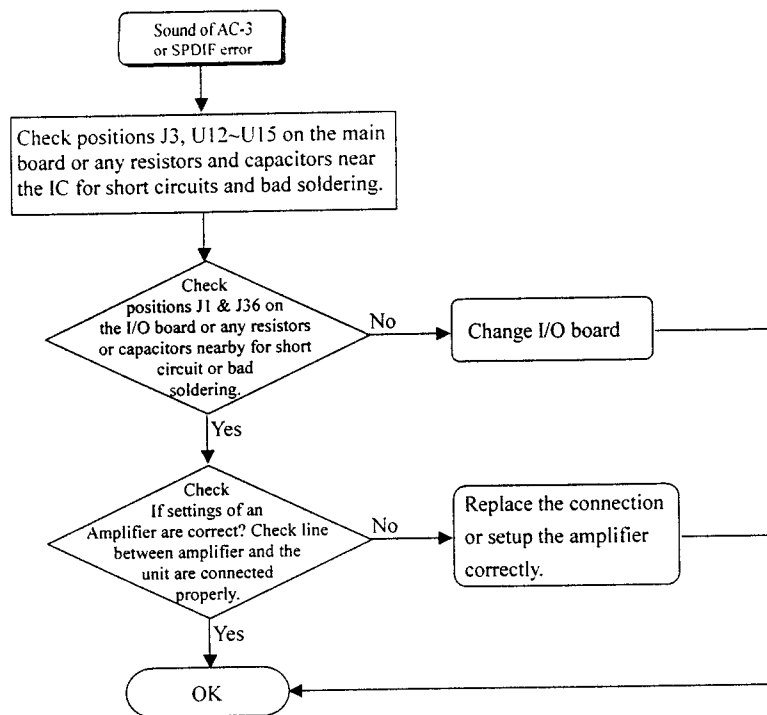
TROUBLE SHOOTING

4. AUDIO TEST

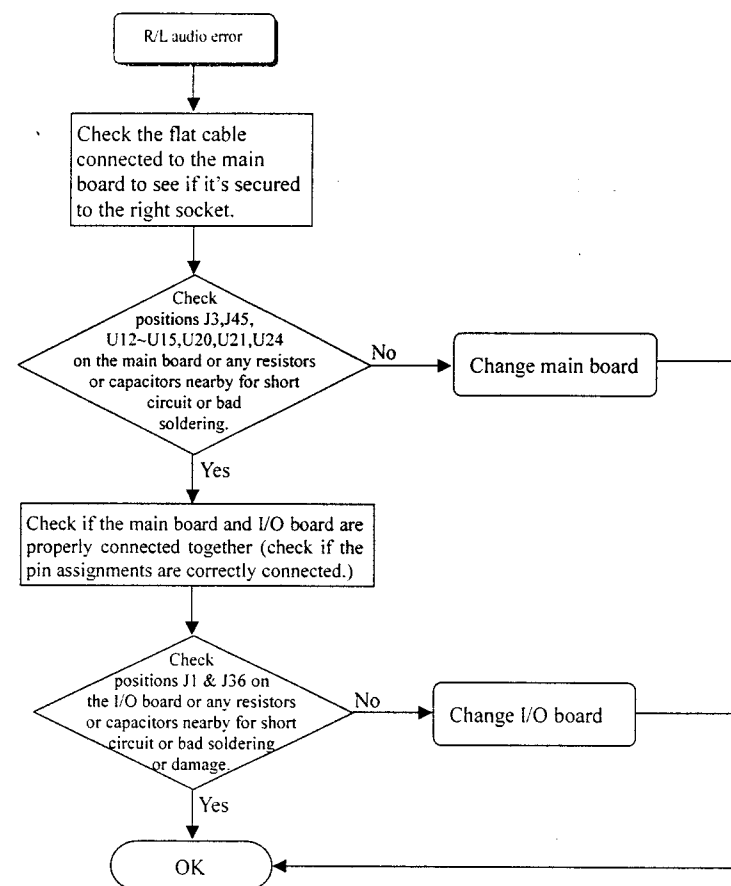
A. Left and Right channel not functioning normally



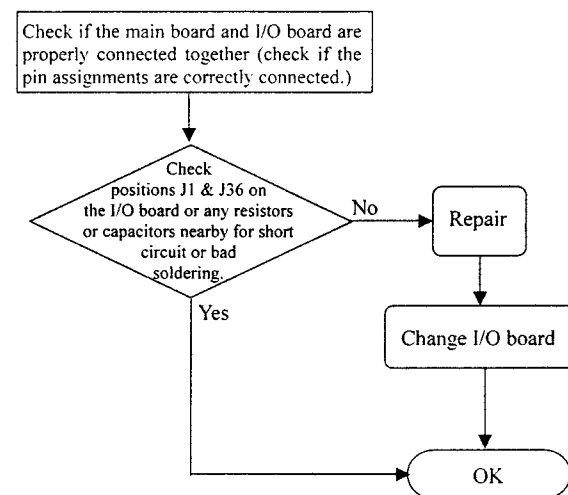
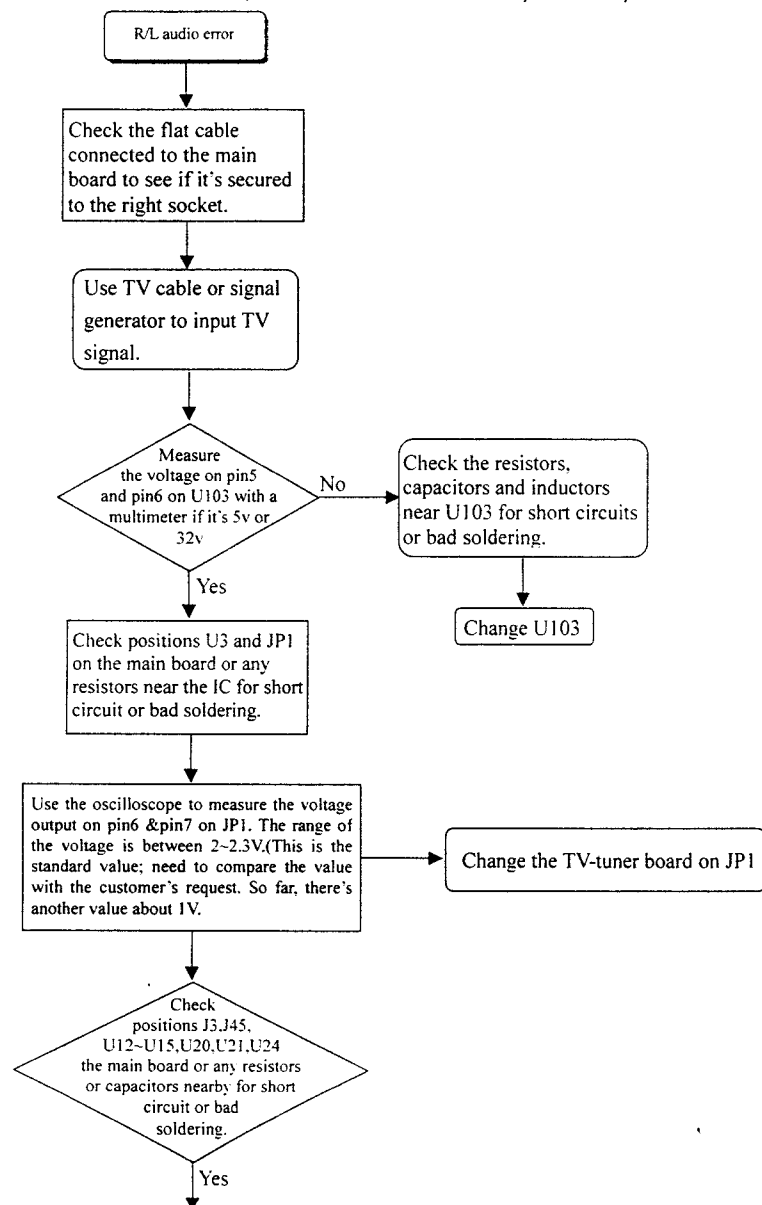
B. The sound of AC-3 or SPDIF not functionally normally



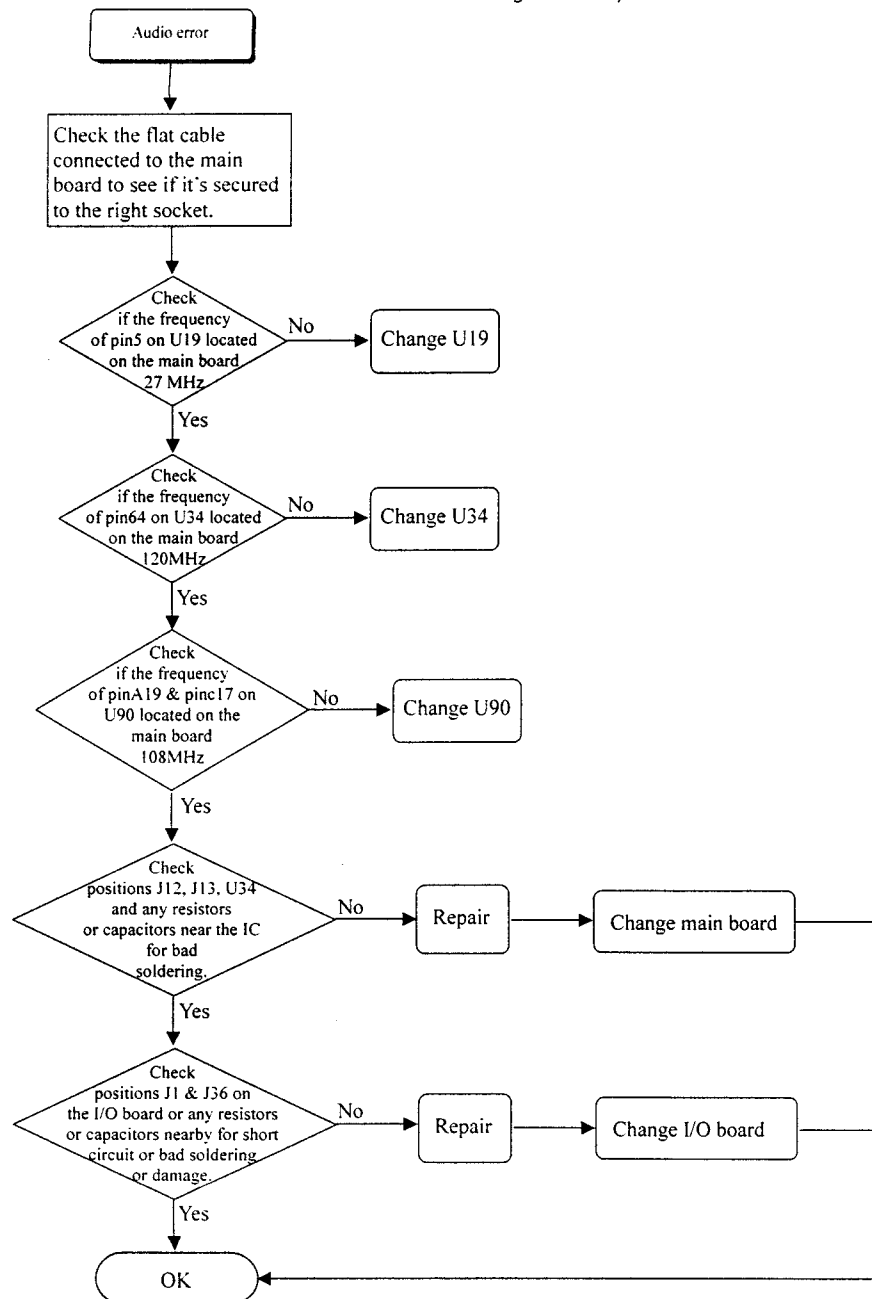
C. No sound in R/L audio inputs or abnormal sound.



D. The sound of TV-tuner audio L/R channel not functionally normally

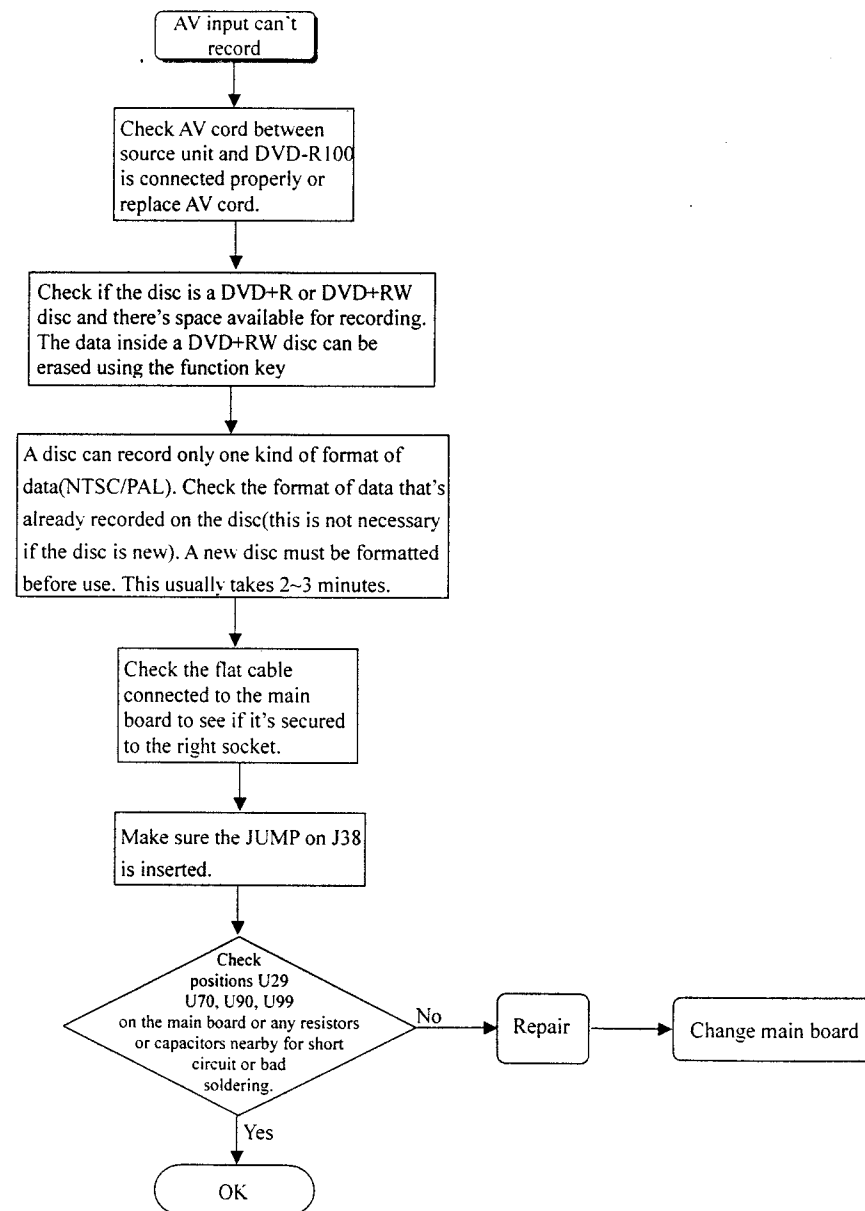


E. TCD-731 or SBC444A or CBS or MP3 not sounding normally

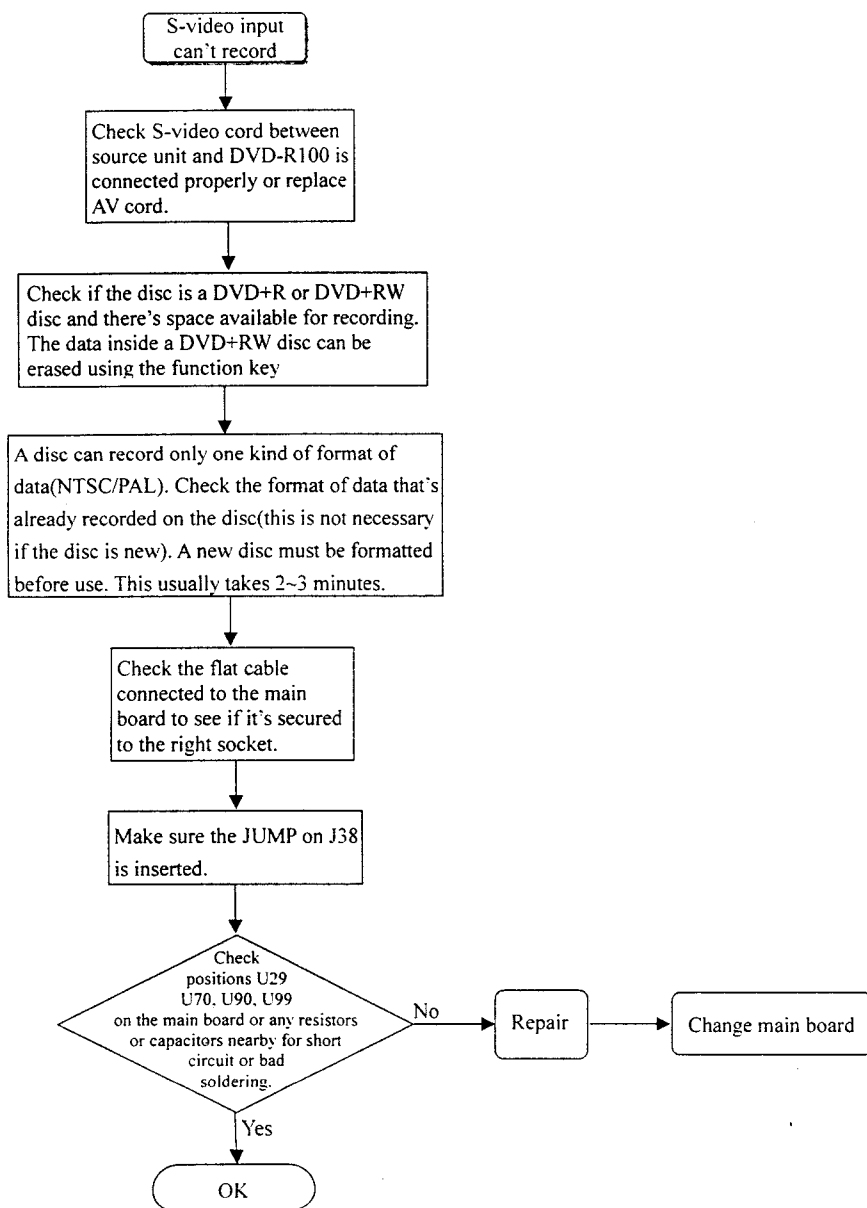


5. RECORD TEST

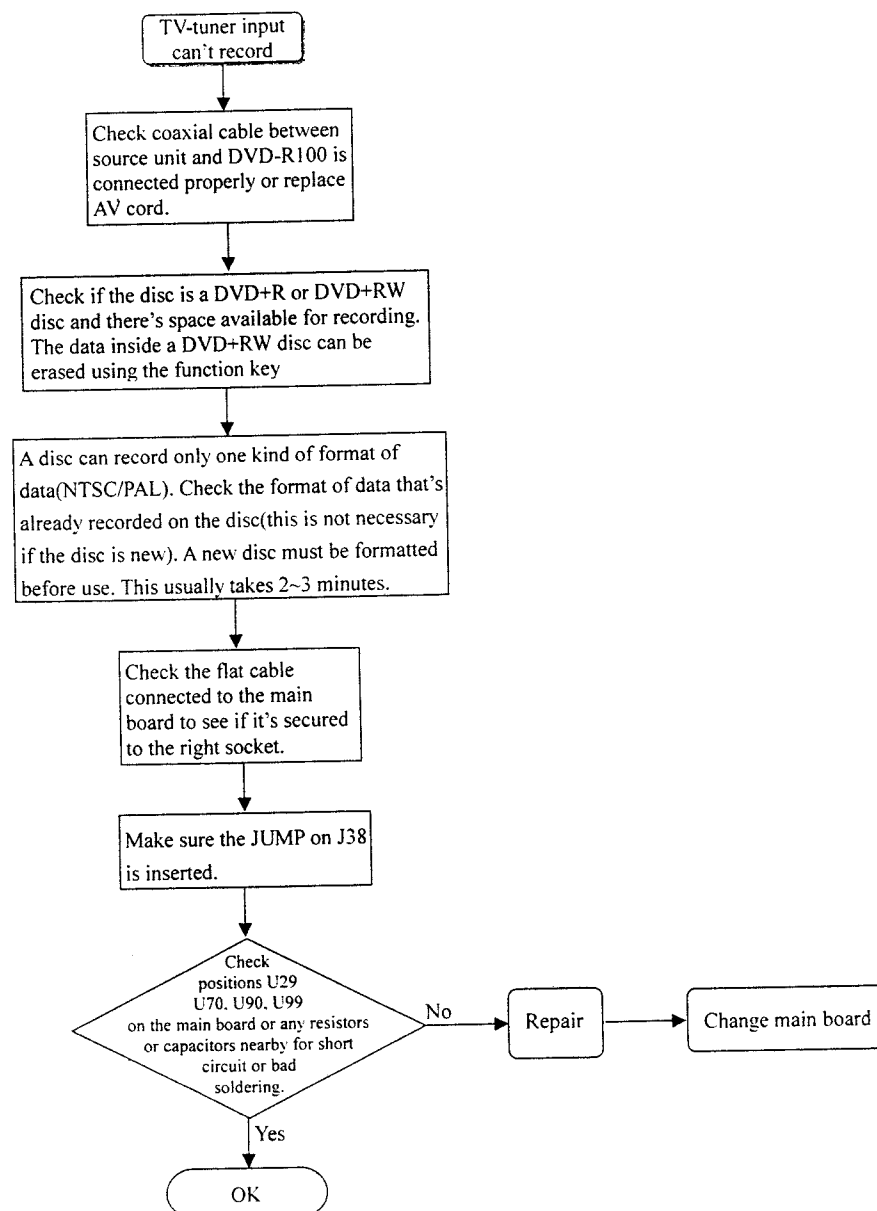
A. AV input can't record



B. S-video input can't record

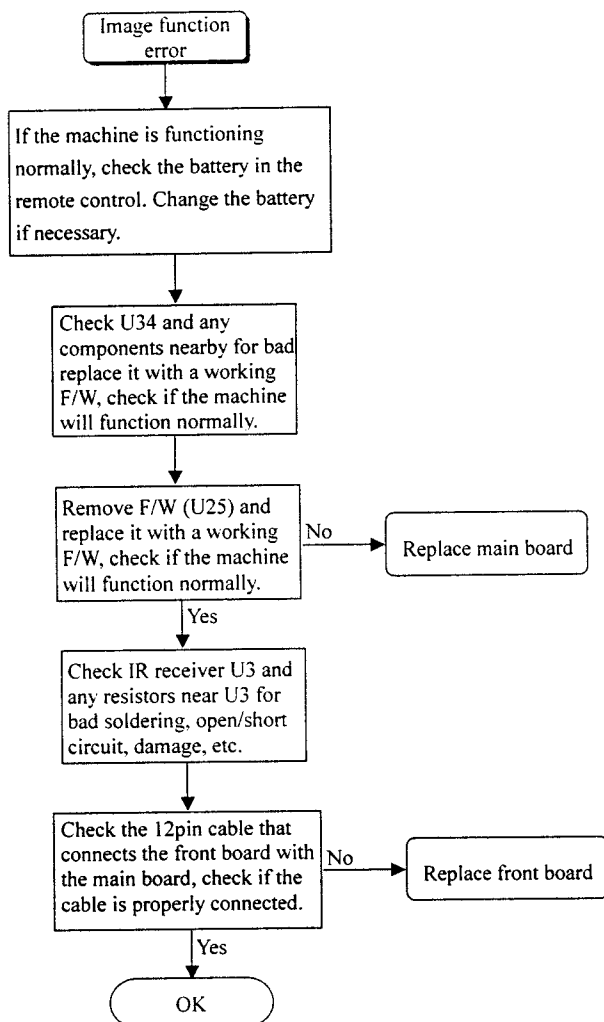


C. TV-tuner input can't record

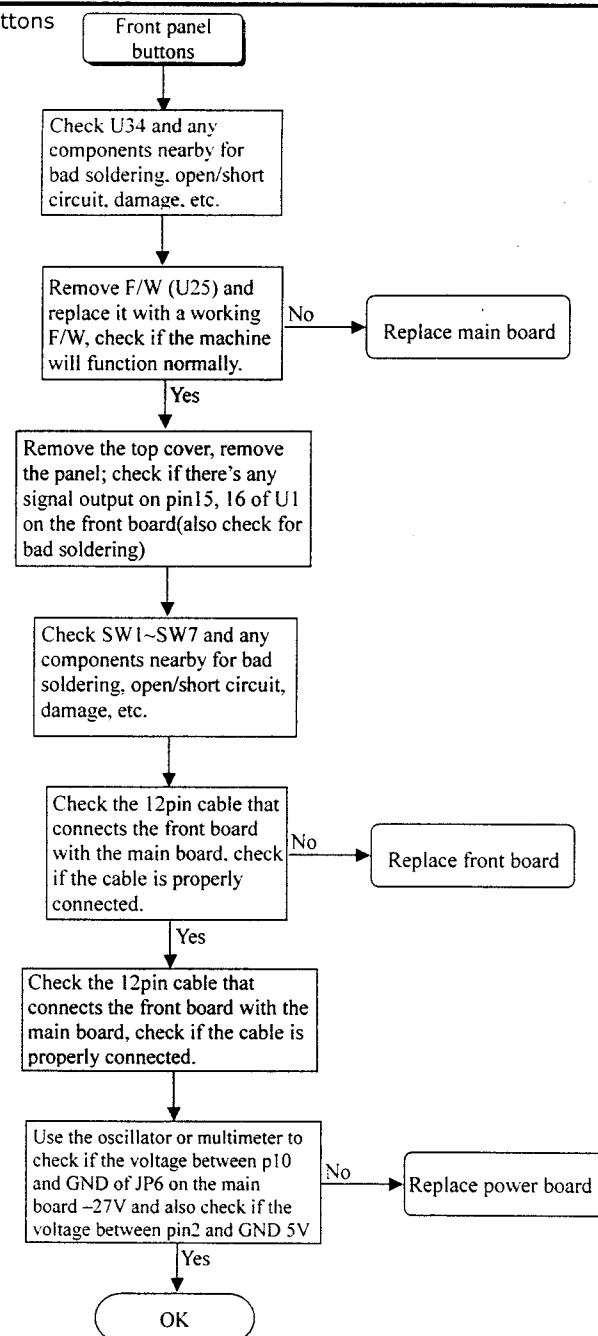


6. FUNCTION TEST

A. Image can't stop or mute, fast forward and fast forward key don't function

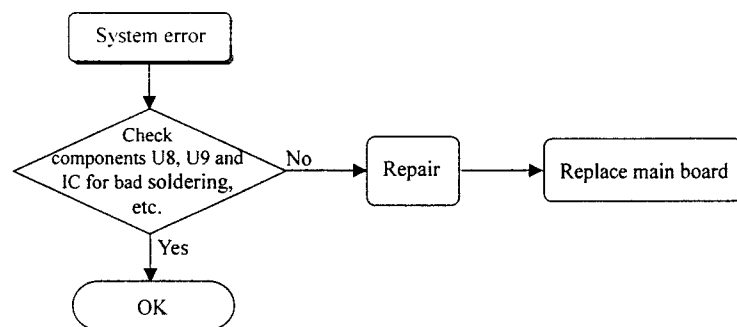


B. Front panel buttons

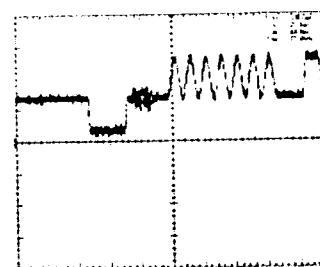


7. **SYSTEM TEST**

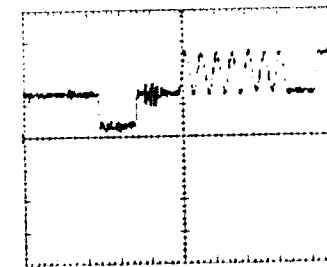
A. Can't enter system setup or after setup, system hangs or don't function



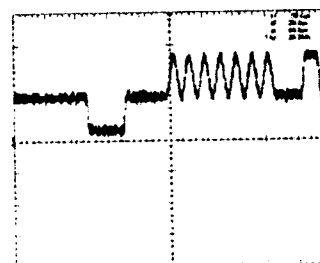
● VIDEO



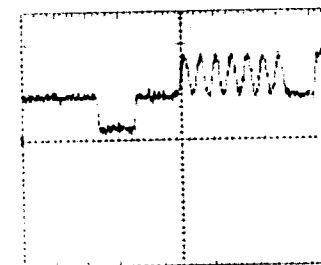
Composite signal
500mV
250MS/s
(REC)



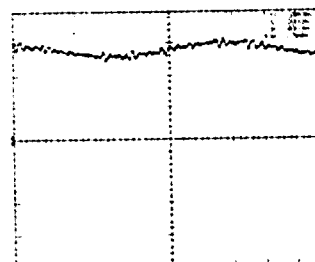
Composite signal
500mV
250MS/s
(PLAY)



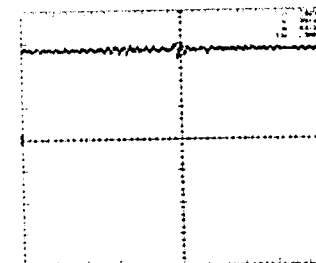
S-video signal (Y)
500mV
250MS/s
(REC)



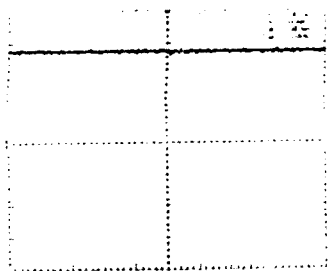
S-video signal (Y)
500mV
250MS/s
(PLAY)



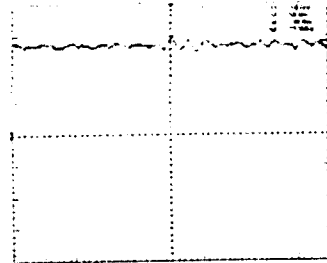
S-video signal (C)
500mV
250MS/s
(REC)



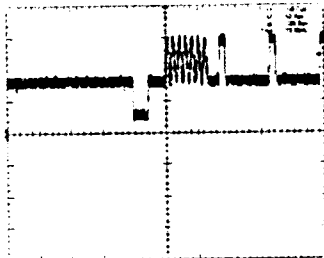
S-video signal (C)
500mV
250MS/s
(PLAY)



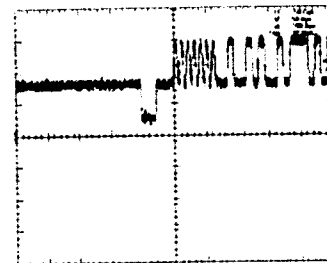
A/V signal (R)
500mV
5.0GS/s
(REC)



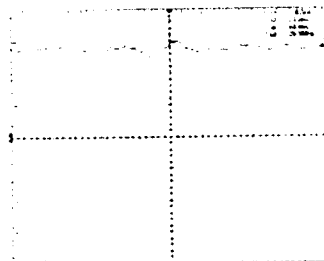
A/V signal (R)
500mV
5.0GS/s
(PLAY)



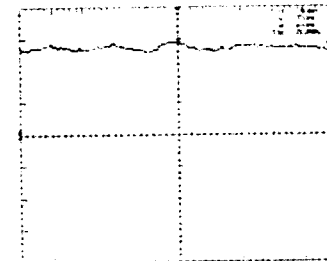
A/V signal (G)
500mV
125MS/s
(REC)



A/V signal (G)
500mV
125MS/s
(PLAY)

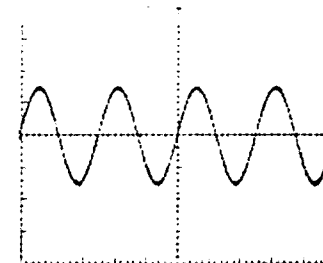


A/V signal (B)
500mV
5.0GS/s
(REC)

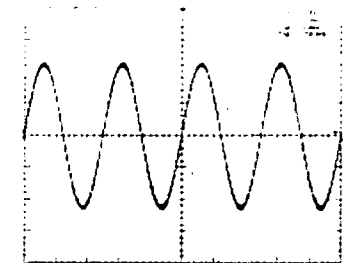


A/V signal (B)
500mV
5.0GS/s
(PLAY)

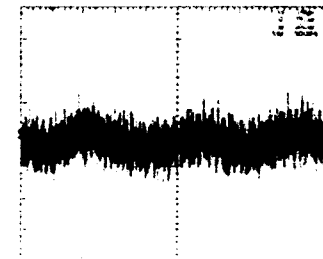
• AUDIO



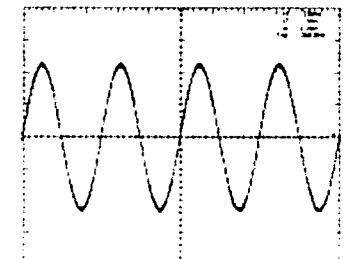
AOL signal
500mV
1.25MS/s
(REC)



AOL signal
500mV
2.5MS/s
(PLAY)



AOR signal
500mV
500MS/s
(REC)



AOR signal
500mV
2.5MS/s
(PLAY)

VOLTAGE CHARTS

● CS 98201 VOLTAGE CHARTS

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
1	1.8	1.8	1.8
2	3.0	2.9	3.0
3	0.0	0.0	0.0
4	4.8	4.8	4.8
5	0.0	0.0	1.5
6	2.9	2.8	2.9
7	0.0	0.1	0.0
8	2.8	0.0	2.8
9	3.0	2.9	2.9
10	1.6	1.6	1.6
11	1.6	1.6	1.6
12	1.5	1.5	1.5
13	1.4	1.5	1.5
14	0.0	0.0	0.0
15	1.5	1.4	1.5
16	1.6	1.5	1.6
17	0.0	1.5	0.0
18	1.5	1.5	1.5
19	3.0	2.9	2.9
20	1.5	1.4	1.5
21	1.6	1.5	1.5
22	0.0	1.7	0.0
23	1.5	1.5	1.5
24	0.0	0.0	0.0
25	0.0	0.0	0.0
26	1.5	1.5	1.5
27	1.5	1.4	1.5
28	1.6	1.5	1.6
29	1.6	1.5	1.6
30	1.5	1.5	1.5
31	3.0	2.9	2.9
32	1.5	1.4	1.5
33	1.7	1.7	1.7
34	0.0	0.0	0.0
35	1.7	1.7	1.6
36	1.6	1.5	1.6
37	1.6	1.5	1.5
38	1.6	1.5	1.5
39	1.5	1.6	1.5
40	1.6	1.6	1.6
41	3.0	2.9	2.9
42	1.5	1.5	1.5
43	0.0	0.0	0.0
44	0.0	0.0	0.0
45	1.5	1.5	1.5
46	1.7	1.7	1.7
47	1.5	1.5	1.5

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
48	1.6	1.5	1.6
49	1.6	1.6	1.6
50	1.6	1.6	1.5
51	1.5	1.5	1.5
52	0.0	0.0	0.0
53	1.6	1.7	1.6
54	3.0	2.8	2.9
55	1.6	1.6	1.6
56	1.5	1.5	1.5
57	1.7	1.8	1.7
58	1.7	1.8	1.7
59	1.8	1.9	1.8
60	1.7	1.8	1.7
61	1.5	1.5	1.5
62	1.7	1.6	1.6
63	0.0	0.0	0.0
64	1.5	1.4	1.5
65	2.9	2.9	3.0
66	1.7	1.6	1.7
67	1.6	1.6	1.7
68	1.7	1.6	1.7
69	1.7	1.7	1.7
70	1.7	1.7	1.7
71	1.7	1.7	1.7
72	0.0	0.0	0.0
73	1.7	1.6	1.7
74	1.7	1.7	1.7
75	0.0	1.6	0.0
76	1.5	1.5	1.5
77	1.6	1.6	1.6
78	1.6	1.5	1.6
79	1.6	1.5	1.6
80	1.6	1.5	1.6
81	1.7	1.7	1.7
82	1.6	1.6	1.6
83	0.0	0.0	0.0
84	0.0	0.0	0.0
85	1.6	1.6	1.6
86	3.0	2.9	2.9
87	1.6	1.6	1.6
88	1.6	1.6	1.6
89	1.7	1.6	1.6
90	1.5	1.4	1.5
91	1.4	1.4	1.4
92	1.6	1.6	1.6
93	1.4	1.4	1.4
94	1.4	1.4	1.4

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
95	1.4	1.4	1.4
96	1.4	1.4	1.4
97	0.0	0.0	0.0
98	0.0	0.0	0.0
99	1.4	1.4	1.4
100	1.7	1.7	1.7
101	1.6	1.5	1.6
102	1.8	1.8	1.8
103	1.8	1.8	1.7
104	1.7	1.8	1.7
105	3.0	2.9	2.9
106	1.8	1.8	1.8
107	4.8	4.8	4.8
108	4.8	4.8	4.8
109	4.8	4.8	4.8
110	4.8	4.8	4.8
111	3.0	3.0	2.9
112	4.8	4.8	4.8
113	2.9	2.9	2.9
114	0.0	0.0	0.0
115	0.0	0.0	0.0
116	0.0	0.0	0.0
117	0.0	0.0	0.0
118	0.0	0.0	0.0
119	0.0	0.0	0.0
120	1.8	1.8	1.8
121	0.0	0.0	0.0
122	0.0	0.0	0.0
123	0.0	1.5	0.0
124	0.0	0.3	1.7
125	0.0	1.4	1.3
126	0.0	1.4	1.7
127	0.0	1.5	0.0
128	2.9	2.9	2.9
129	3.0	2.9	3.0
130	3.0	2.9	2.9
131	1.8	1.8	1.8
132	0.0	0.0	0.0
133	0.0	0.0	1.7
134	0.0	1.5	0.0
135	0.0	1.5	0.0
136	0.0	1.5	0.0
137	0.0	0.3	1.6
138	0.0	0.2	1.7
139	0.0	0.3	1.6
140	0.0	0.2	1.7
141	0.0	1.5	1.1

VOLTAGE CHARTS

● CS 98201 VOLTAGE CHARTS

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
142	0.0	0.3	0.0
143	0.0	0.4	0.0
144	3.0	2.9	2.9
145	0.0	0.0	0.0
146	3.0	2.9	2.9
147	2.9	2.8	2.8
148	0.0	0.0	0.0
149	1.8	1.8	1.8
150	0.0	0.0	0.0
151	1.3	1.4	1.4
152	2.9	2.9	2.9
153	0.0	0.0	0.0
154	1.0	1.0	1.0
155	2.9	2.8	2.9
156	0.0	0.0	0.0
157	1.1	1.1	1.1
158	2.9	2.9	2.9
159	0.0	0.0	0.0
160	1.8	1.8	1.8
161	1.2	1.2	1.2
162	1.2	1.2	1.2
163	0.0	0.0	0.0
164	2.9	2.9	2.9
165	0.0	0.0	0.0
166	2.9	2.9	2.9
167	2.9	2.9	2.9
168	3.0	2.9	2.9
169	1.7	1.7	1.7
170	2.9	0.0	2.9
171	0.0	0.0	0.0
172	2.9	0.0	1.5
173	2.9	0.0	1.5
174	2.9	2.9	2.9
175	2.9	0.0	2.9
176	0.0	0.0	0.0
177	0.0	1.6	0.0
178	4.8	4.7	4.7
179	4.8	4.7	4.7
180	1.8	1.8	1.7
181	0.0	0.0	0.0
182	0.0	0.0	0.0
183	4.2	4.2	4.2
184	2.9	0.0	2.9
185	0.0	0.0	0.0
186	2.9	2.9	1.7
187	2.9	2.9	1.7
188	2.9	2.9	2.9

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
189	2.9	2.9	2.9
190	0.0	0.0	0.0
191	2.9	1.5	2.9
192	2.9	1.6	1.7
193	3.0	2.9	1.7
194	2.9	2.8	2.9
195	2.6	2.6	2.6
196	2.0	2.0	2.0
197	4.7	4.7	4.8
198	2.5	2.5	2.5
199	0.0	1.6	0.0
200	0.0	1.5	0.0
201	0.0	1.6	0.0
202	0.0	0.0	0.0
203	1.8	1.8	1.7
204	0.0	0.0	0.0
205	1.3	1.3	1.3
206	2.9	2.8	2.9
207	0.0	0.0	0.0
208	1.1	1.1	1.1
209	2.9	2.9	2.9
210	0.0	0.0	0.0
211	1.3	1.5	1.2
212	2.9	2.8	2.9
213	0.0	0.0	0.0
214	1.8	1.8	1.8
215	1.2	1.2	1.2
216	1.2	1.2	1.2
217	0.0	0.0	0.0
218	2.9	2.9	2.9
219	0.0	0.0	0.0
220	2.9	2.9	2.9
221	2.9	2.9	2.9
222	1.6	1.6	1.5
223	1.7	1.7	1.7
224	1.6	1.6	1.5
225	0.0	0.0	0.0
226	1.5	1.6	1.5
227	0.0	0.0	0.0
228	0.0	0.0	0.0
229	0.0	0.0	1.5
230	2.9	2.9	2.9
231	1.6	1.7	1.7
232	1.6	1.6	1.8
233	0.0	0.0	0.0
234	0.0	1.6	1.6
235	1.6	1.5	1.6

MODE PIN No.	CS 98201 (U34)		
	STOP	REC	PLAY
236	1.8	1.7	1.7
237	1.8	1.8	1.8
238	0.0	0.0	0.0
239	0.0	0.0	0.0
240	0.0	0.0	0.0

VOLTAGE CHARTS

EEPROM VOLTAGE CHARTS

MODE PIN No.	STOP	REC	PLAY
1	1.5	1.5	1.4
2	1.6	1.5	1.5
3	0.0	1.6	1.6
4	0.1	1.6	1.5
5	0.1	1.5	0.0
6	0.0	1.5	0.0
7	0.0	1.5	1.5
8	0.0	1.6	1.6
9	1.6	1.5	1.6
10	0.0	1.6	0.0
11	0.0	1.7	1.7
12	0.0	2.9	2.9
13	0.0	1.6	1.6
14	0.0	2.9	2.9
15	0.0	0.0	0.0
16	1.5	1.5	0.0

MODE PIN No.	STOP	REC	PLAY
17	1.6	1.5	1.5
18	0.0	1.6	1.6
19	0.0	1.8	1.7
20	0.0	1.7	1.6
21	0.0	1.7	1.7
22	1.7	1.6	1.7
23	0.0	1.6	1.7
24	0.0	1.7	1.7
25	1.7	1.6	1.7
26	1.7	1.7	1.7
27	0.0	0.0	0.0
28	1.7	1.7	1.7
29	1.5	1.4	1.4
30	0.0	0.0	0.0
31	1.6	1.5	1.6
32	0.0	0.0	0.0

MODE PIN No.	STOP	REC	PLAY
33	1.4	1.4	1.4
34	0.0	0.0	0.0
35	1.5	1.4	1.4
36	0.0	0.0	0.0
37	3.0	2.9	2.9
38	1.5	1.4	1.4
39	0.0	0.0	0.0
40	1.5	1.4	1.4
41	0.0	0.0	0.0
42	1.5	1.4	1.4
43	0.0	1.4	0.0
44	1.6	1.5	1.5
45	1.6	1.5	1.5
46	0.0	0.0	0.0
47	0.0	0.0	0.0
48	1.5	1.6	1.5

CS4362 VOLTAGE CHARTS

MODE PIN No.	STOP	REC	PLAY
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	5.0	4.7	4.7
5	0.0	0.0	0.0
6	1.6	1.6	1.5
7	1.6	1.6	1.5
8	0.0	1.6	1.6
9	1.6	1.5	1.6
10	1.6	1.5	1.6
11	0.0	0.0	0.0
12	1.6	1.6	1.6
13	0.0	0.0	0.0
14	0.0	4.8	0.0
15	4.8	4.8	4.8
16	4.8	4.8	4.8

MODE PIN No.	STOP	REC	PLAY
17	4.8	4.8	4.8
18	4.8	4.8	4.8
19	3.0	2.9	3.0
20	4.5	4.5	4.5
21	2.3	2.4	2.4
22	4.8	0.0	4.8
23	4.8	0.0	4.8
24	5.0	0.0	4.7
25	4.8	4.7	4.8
26	4.8	0.0	0.0
27	2.4	2.4	2.4
28	2.4	2.4	2.4
29	2.4	2.4	2.4
30	2.4	2.4	2.4
31	0.0	0.0	0.0
32	4.8	4.7	4.7

MODE PIN No.	STOP	REC	PLAY
33	2.4	2.4	2.4
34	2.4	2.4	2.4
35	2.4	2.4	2.4
36	2.4	2.4	2.4
37	2.4	2.4	2.4
38	2.4	2.4	2.4
39	2.4	2.4	2.4
40	2.4	2.4	2.4
41	4.8	0.0	0.0
42	0.0	0.0	0.0
43	3.0	3.0	3.0
44	0.0	0.0	0.0
45	0.0	0.0	0.0
46	0.0	0.0	0.0
47	0.0	0.0	0.0
48	0.0	0.0	0.0

N5532A VOLTAGE CHARTS

MODE PIN No.	STOP	REC	PLAY
1	2.4	2.4	2.5
2	2.4	2.4	2.4
3	2.4	2.4	2.4
4	-12	-12	-12

MODE PIN No.	STOP	REC	PLAY
5	2.4	2.4	2.4
6	2.4	2.4	2.4
7	2.4	2.4	2.5
8	12	12	12

VOLTAGE CHARTS

SAA7115 VOLTAGE CHARTS

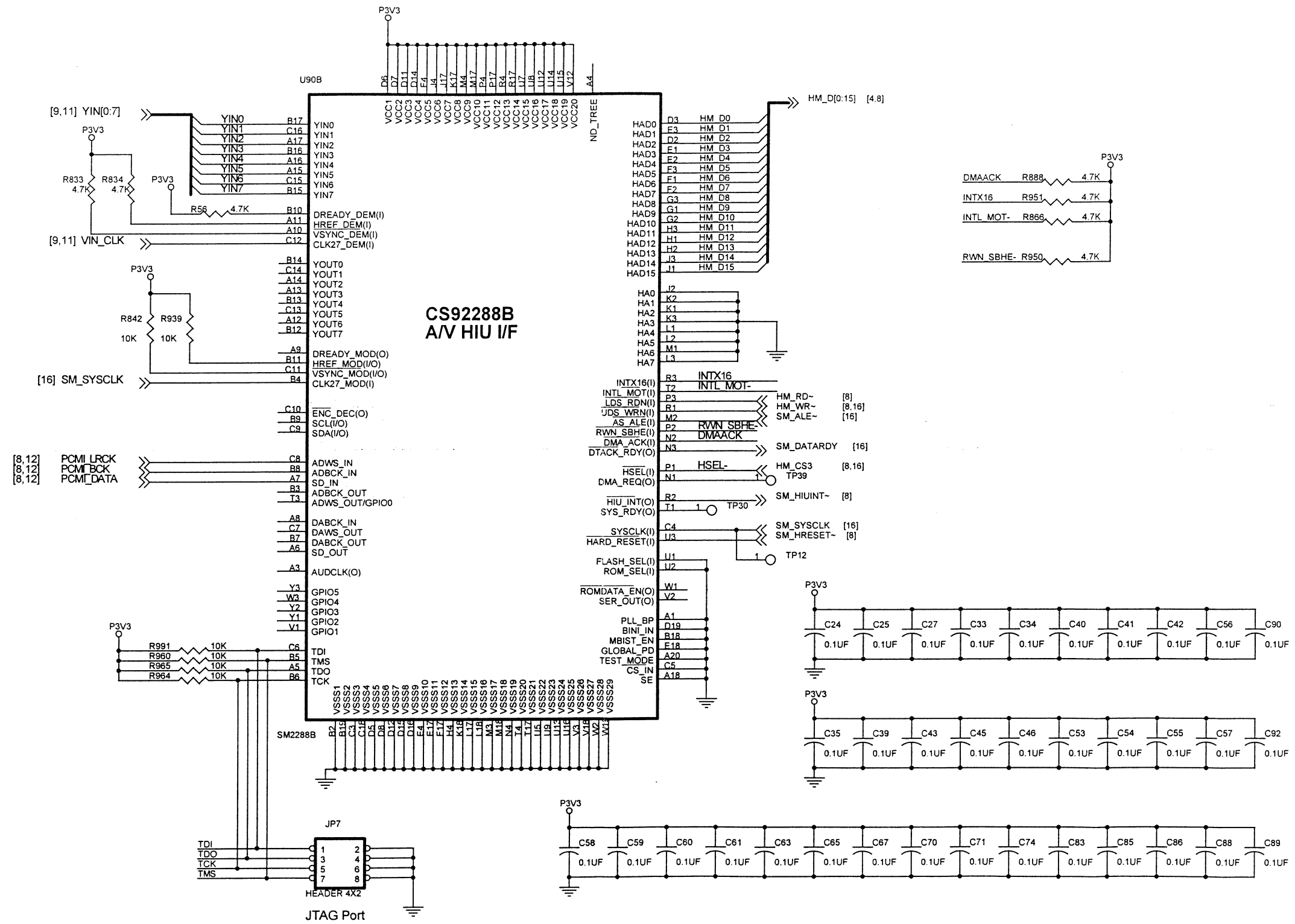
MODE PIN No.	STOP	REC	PLAY
1	3.3	3.3	3.3
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	1.7	1.7	1.7
7	1.6	1.6	1.6
8	3.3	3.3	3.3
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	3.3	3.3	3.3
12	0.0	0.0	0.0
13	1.0	1.0	1.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	1.0	1.0	1.0
17	3.3	3.3	3.3
18	0.0	0.0	0.0
19	1.0	1.0	1.0
20	0.8	0.8	0.8
21	0.0	0.0	0.0
22	0.0	0.0	0.0
23	3.3	3.3	3.3
24	0.0	0.0	0.0
25	3.3	3.3	3.3
26	0.0	0.0	0.0
27	2.9	2.9	2.9
28	1.7	1.7	1.7
29	0.0	0.0	0.0
30	3.3	3.3	3.3
31	4.8	4.8	4.8
32	4.8	4.8	4.8
33	3.3	3.3	3.3
34	0.0	0.0	0.0

MODE PIN No.	STOP	REC	PLAY
35	0.0	0.0	0.0
36	1.8	1.8	1.8
37	1.7	1.7	1.7
38	0.0	0.0	0.0
39	1.7	1.7	1.7
40	1.7	1.7	1.7
41	1.7	1.7	1.7
42	2.4	2.4	2.4
43	3.3	3.3	3.3
44	0.0	0.0	0.0
45	1.7	1.8	1.7
46	0.0	0.0	0.0
47	0.0	0.0	0.0
48	0.0	0.0	0.0
49	0.0	0.0	0.0
50	0.0	0.0	0.0
51	3.2	3.3	3.3
52	0.0	0.0	0.0
53	0.0	0.0	0.0
54	1.8	1.7	1.8
55	0.0	0.0	0.0
56	1.7	1.7	1.7
57	1.8	1.8	1.8
58	3.3	3.3	3.3
59	1.7	1.8	1.7
60	1.7	1.7	1.7
61	1.6	1.7	1.6
62	1.7	1.7	1.7
63	0.0	0.0	0.0
64	0.0	0.0	0.0
65	0.0	0.0	0.0
66	0.0	0.0	0.0
67	0.0	0.0	0.0
68	3.3	3.3	3.3

MODE PIN No.	STOP	REC	PLAY
69	0.0	0.0	0.0
70	0.0	0.0	0.0
71	0.0	0.0	0.0
72	0.0	0.0	0.0
73	2.4	2.4	2.4
74	2.4	2.4	2.4
75	3.3	3.3	3.3
76	0.0	0.0	0.0
77	2.4	2.4	2.4
78	0.0	0.0	0.0
79	2.4	2.4	2.4
80	0.0	0.0	0.0
81	1.7	1.8	1.7
82	1.7	1.7	1.7
83	3.3	3.3	3.3
84	1.7	1.8	1.7
85	1.8	1.8	1.8
86	1.6	1.7	1.6
87	1.8	1.8	1.7
88	0.0	0.0	0.0
89	1.6	1.7	1.7
90	1.7	1.7	1.7
91	0.0	0.0	0.0
92	1.8	1.9	1.8
93	3.3	3.3	3.3
94	1.7	1.8	1.7
95	1.8	1.8	1.8
96	0.0	0.0	0.0
97	0.0	0.0	0.0
98	0.0	0.0	0.0
99	0.0	0.0	0.0
100	0.0	0.0	0.0

PRELIMINARY

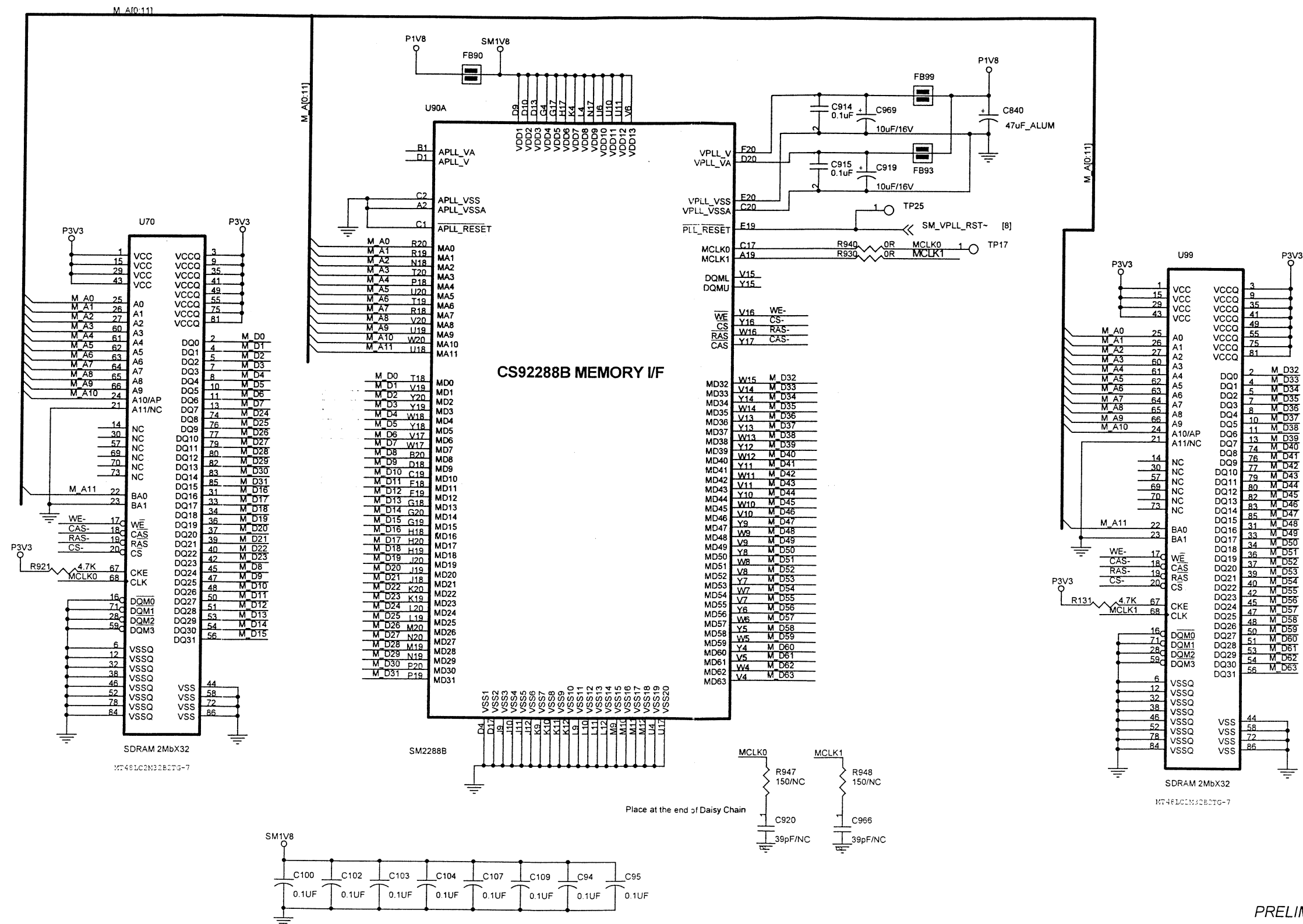
CONFIDENTIAL



PRELIMINARY

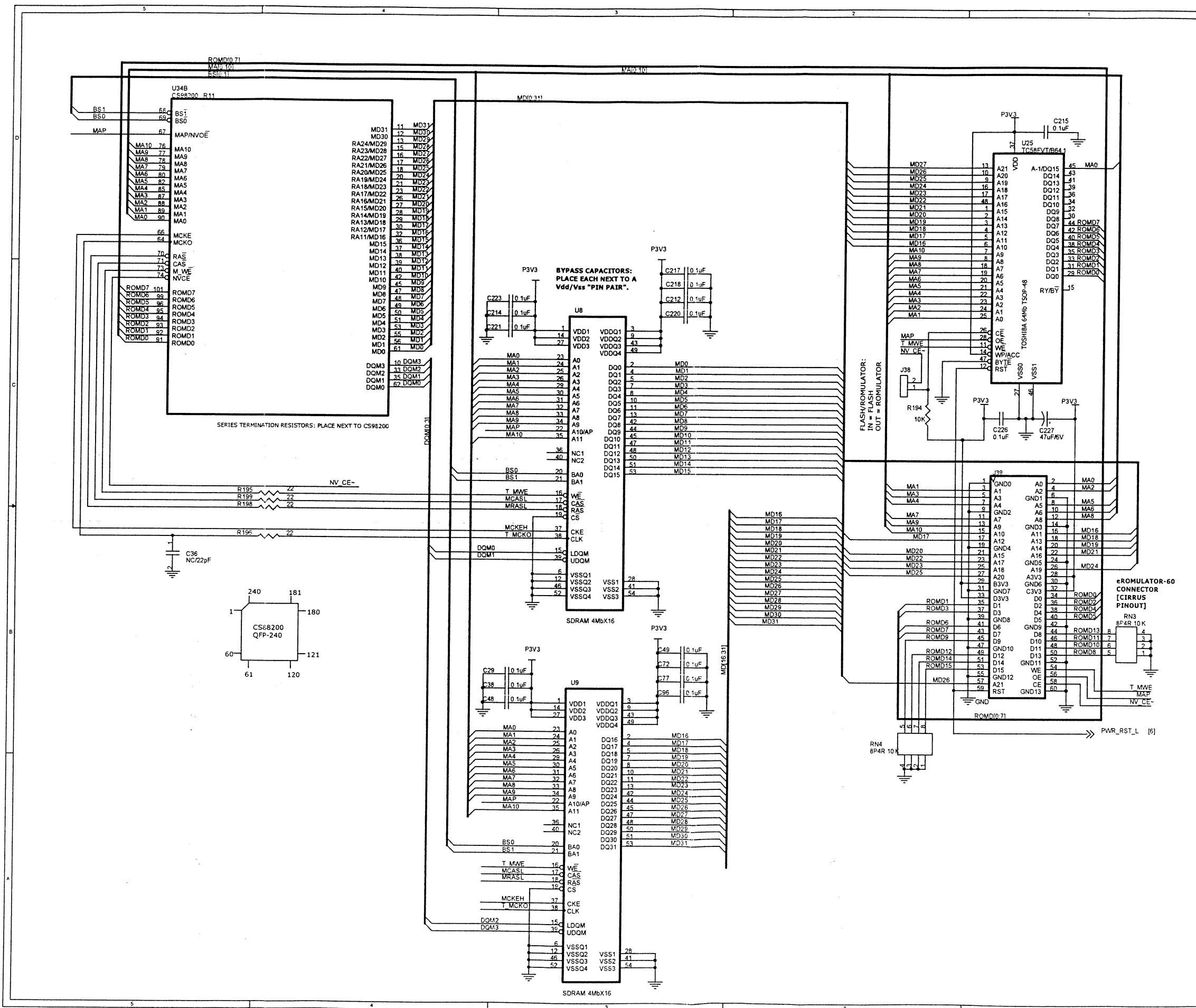
PRELIMINARY

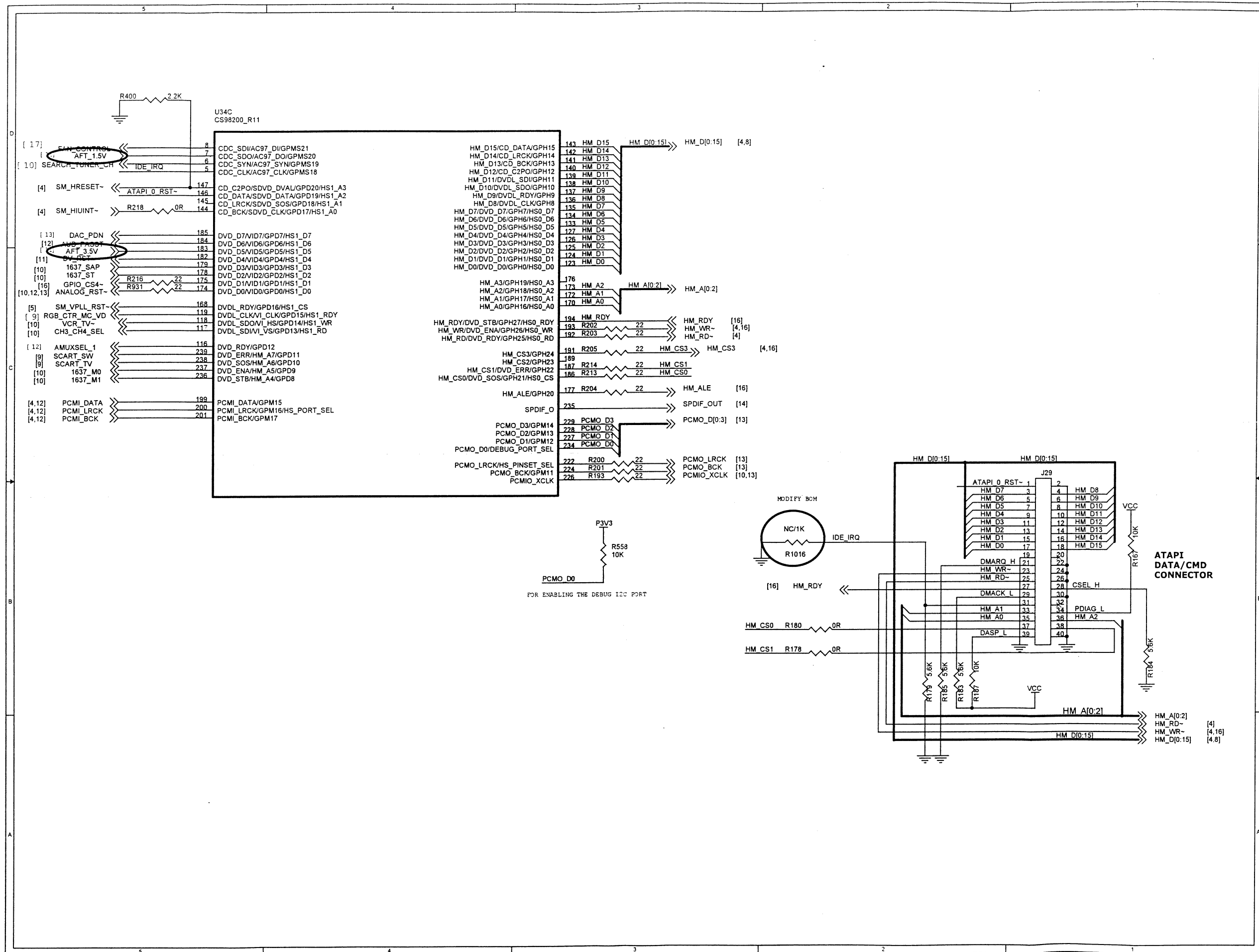
CONFIDENTIAL

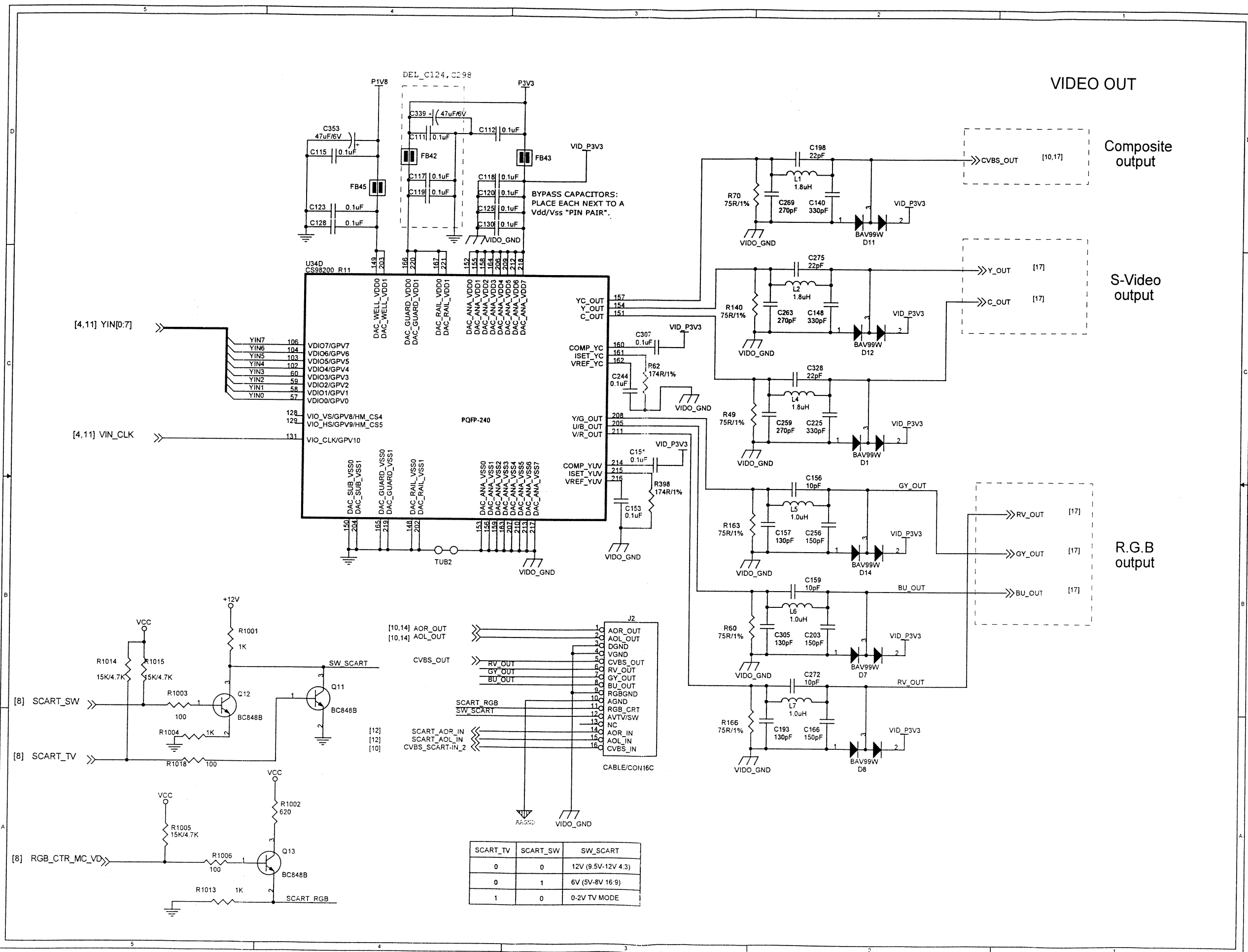


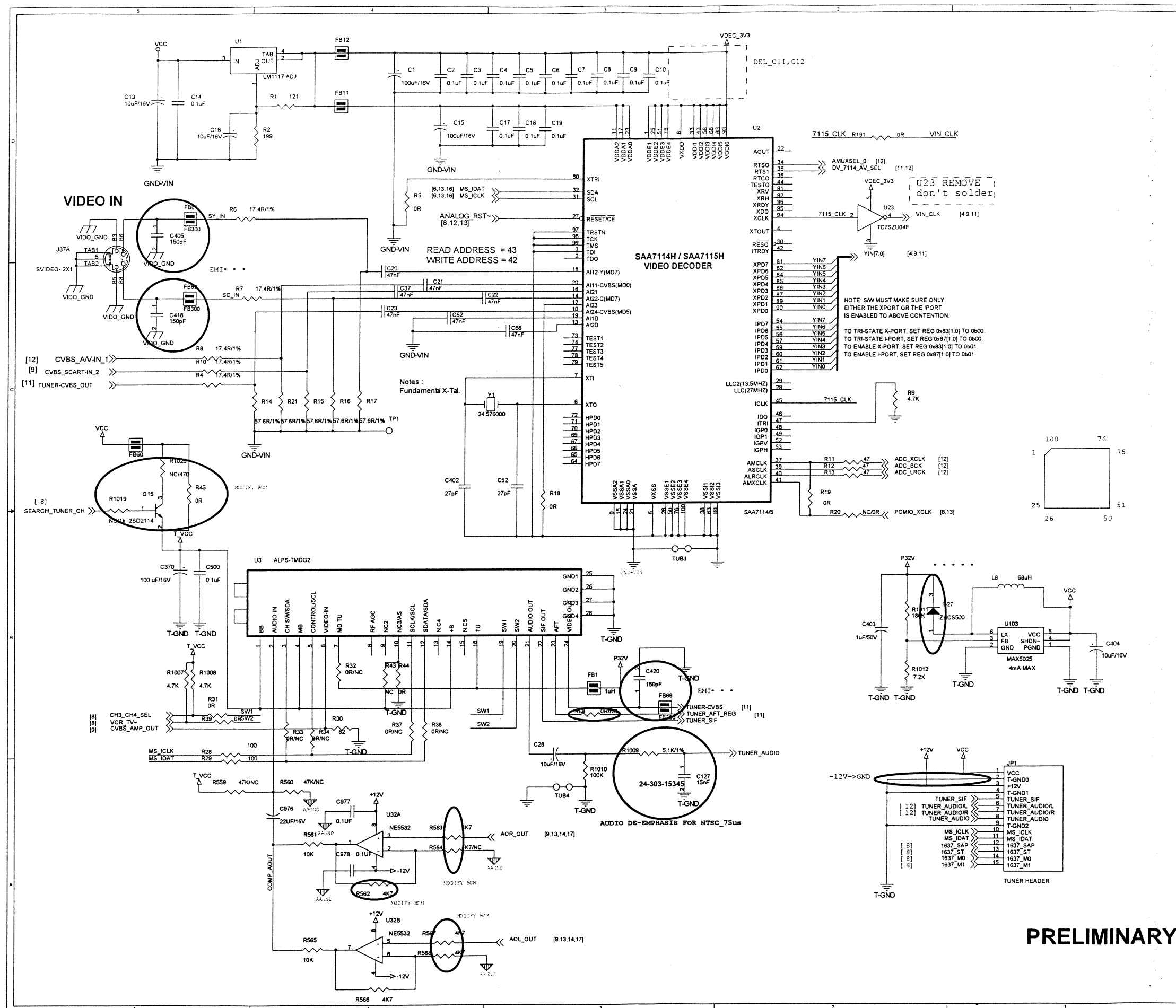
CONFIDENTIAL

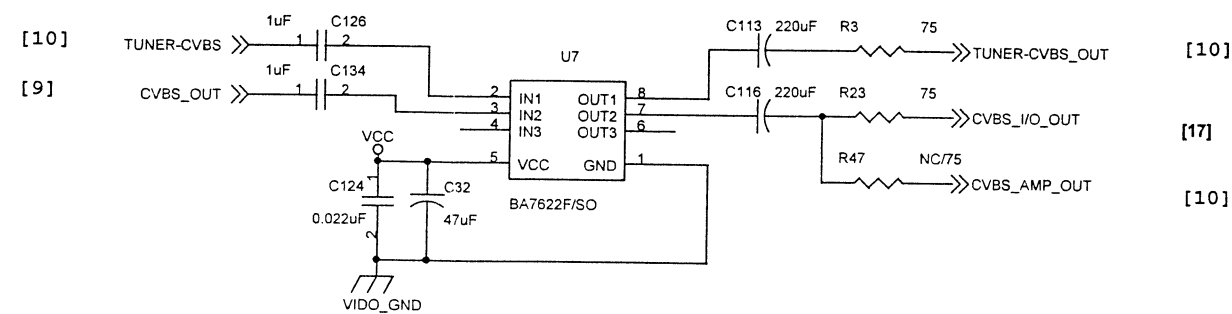
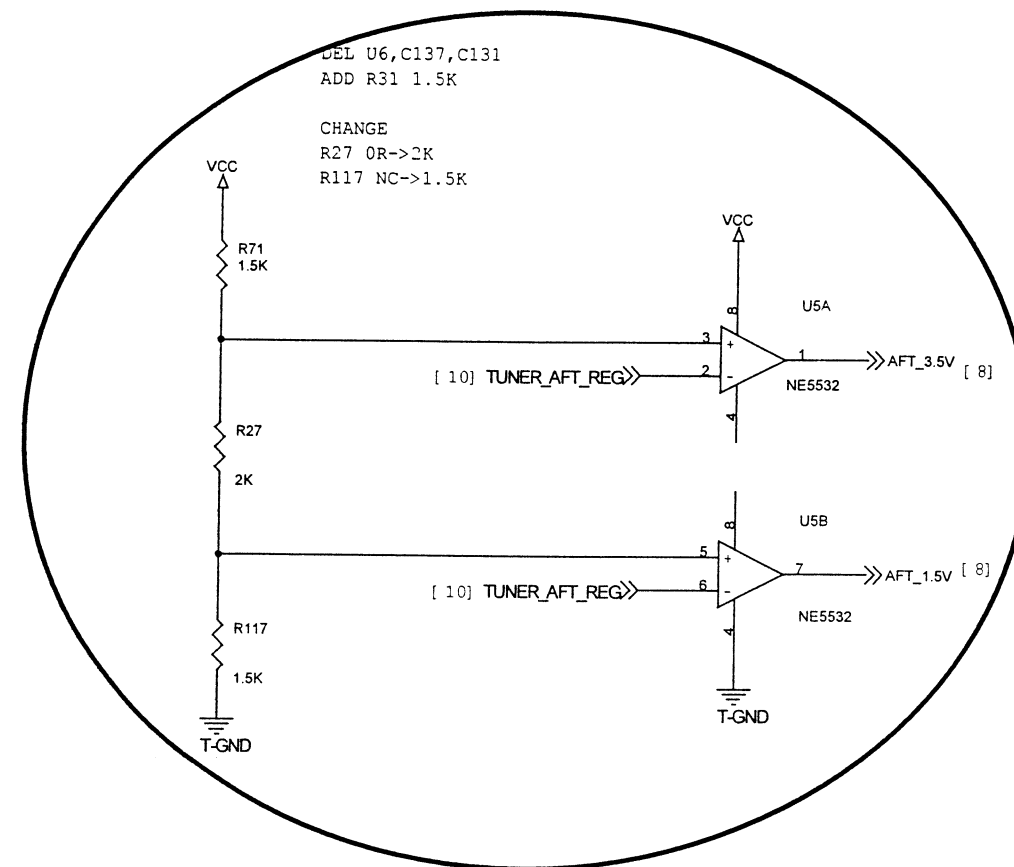
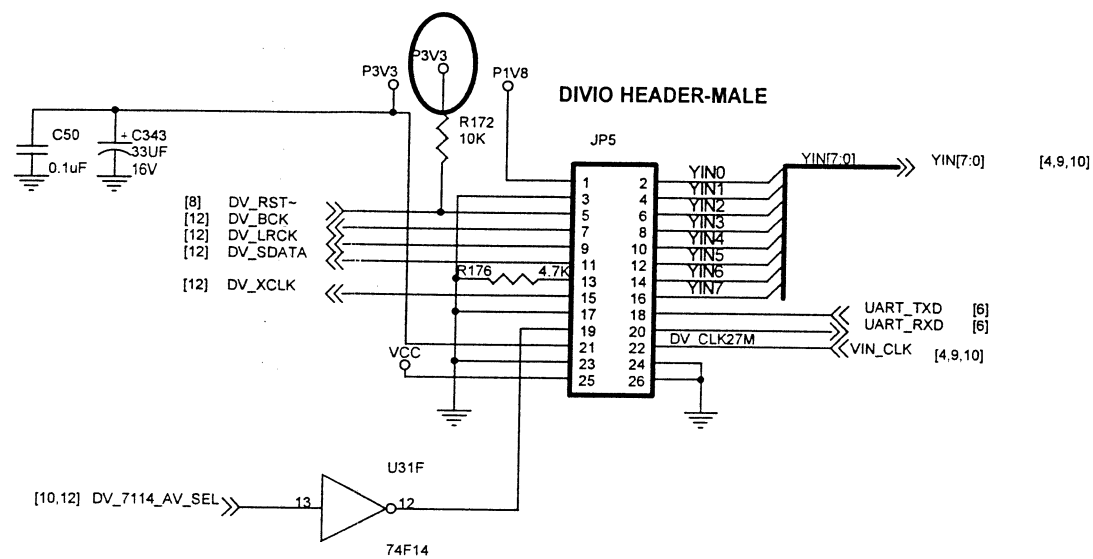
PRELIMINARY

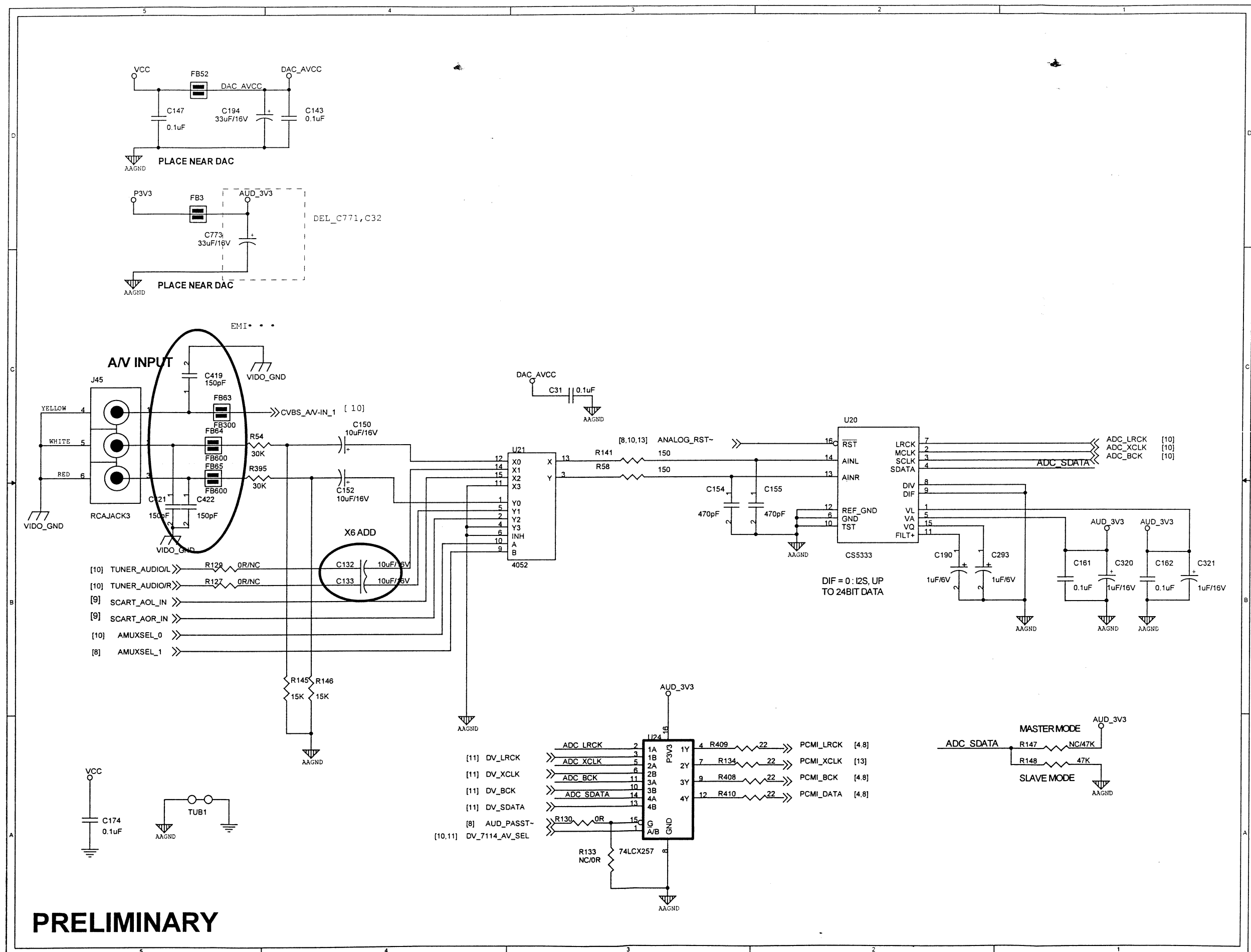


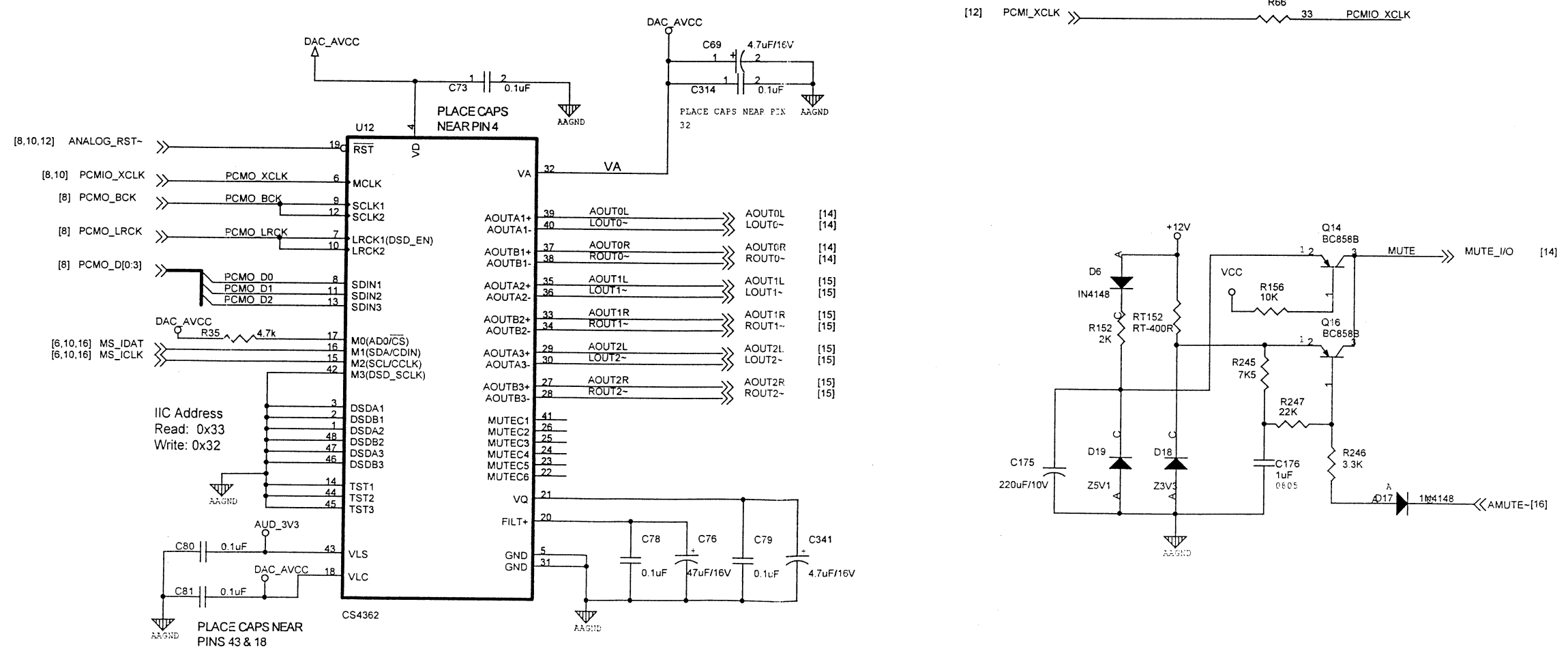
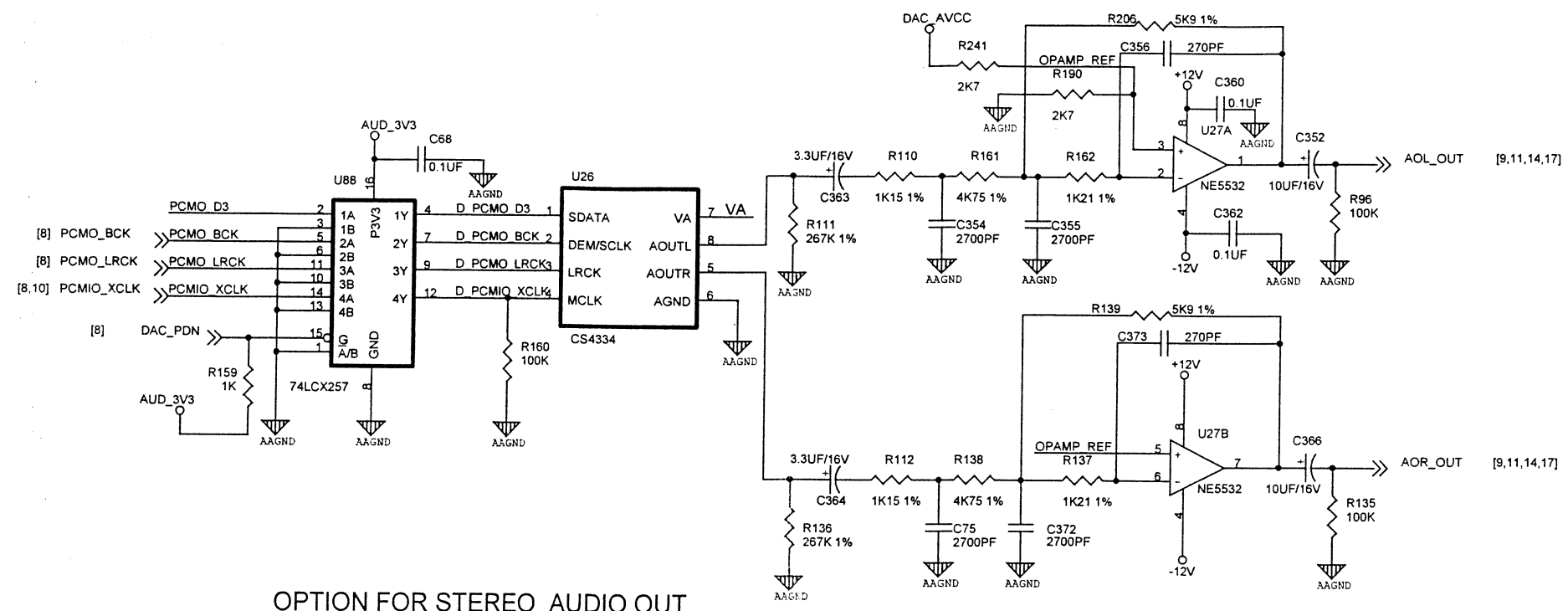


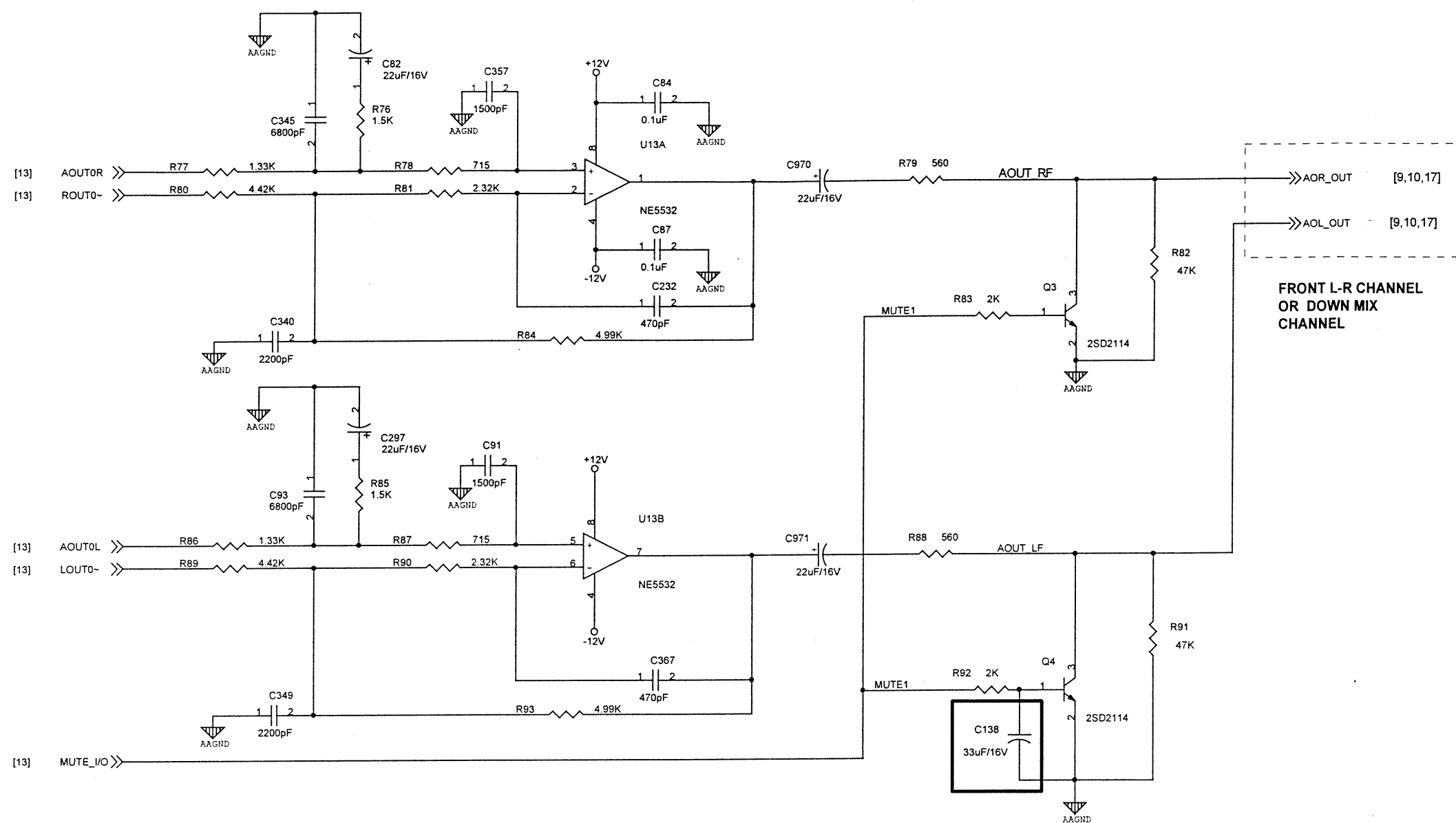




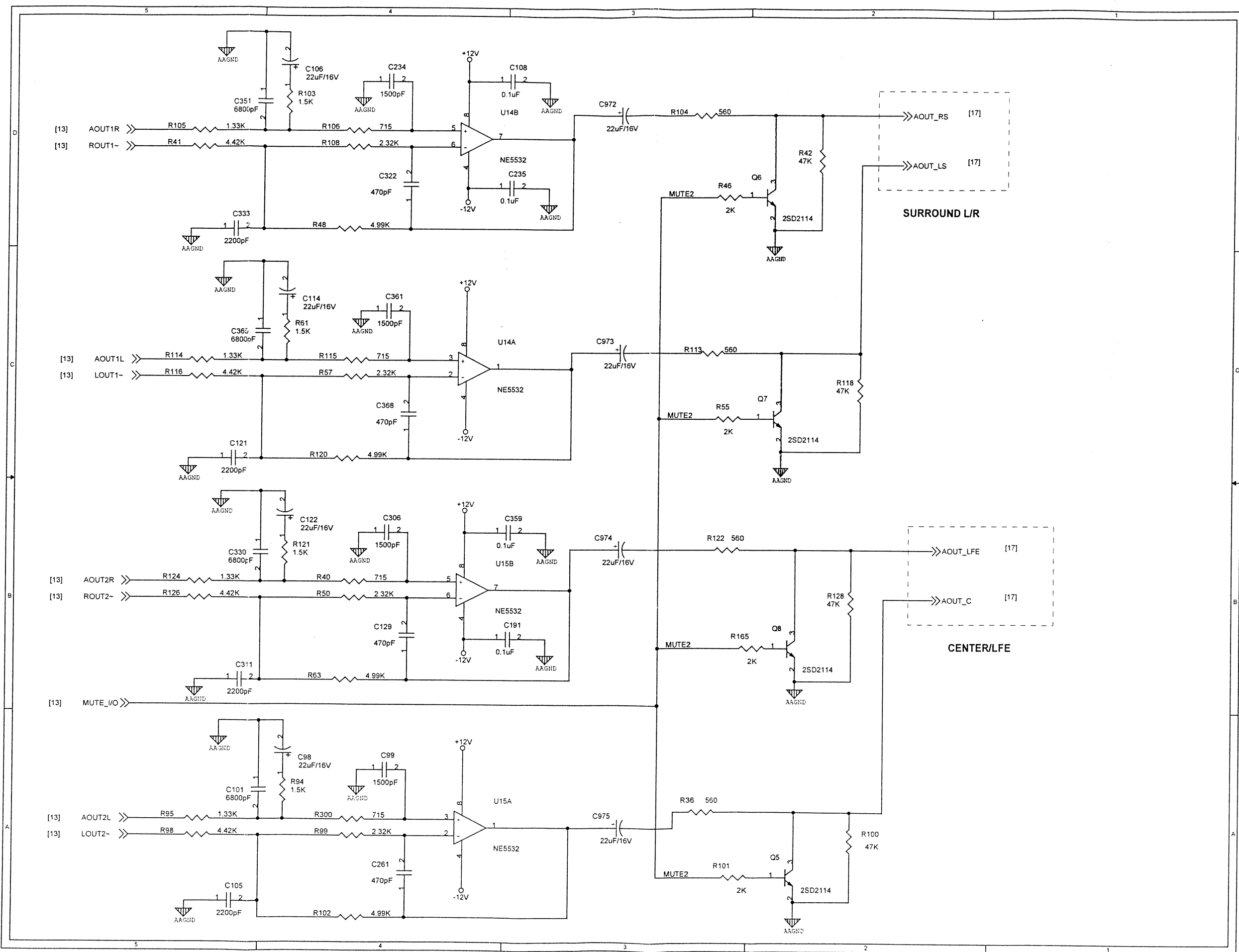




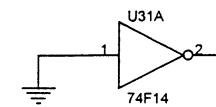
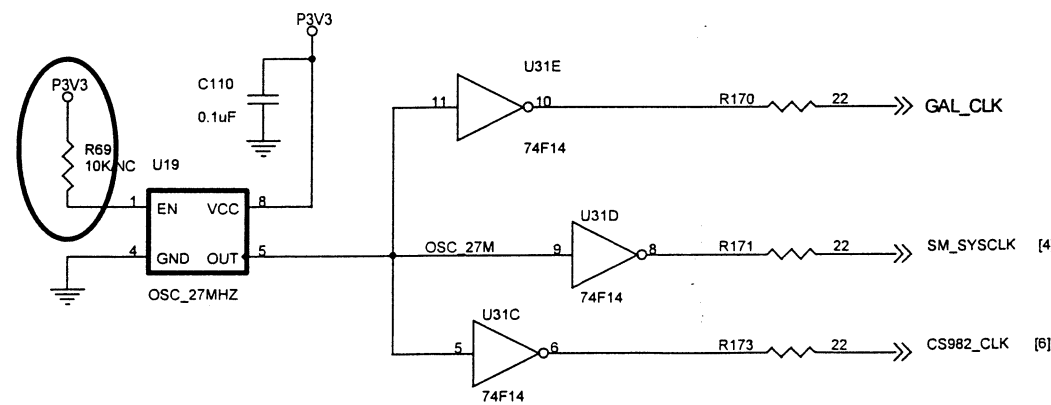
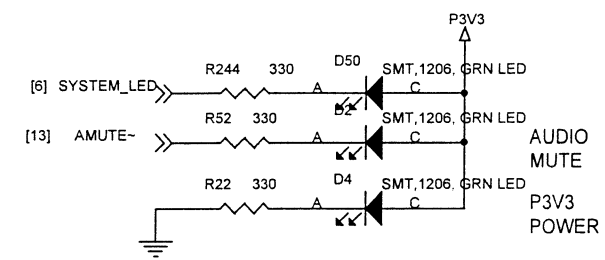
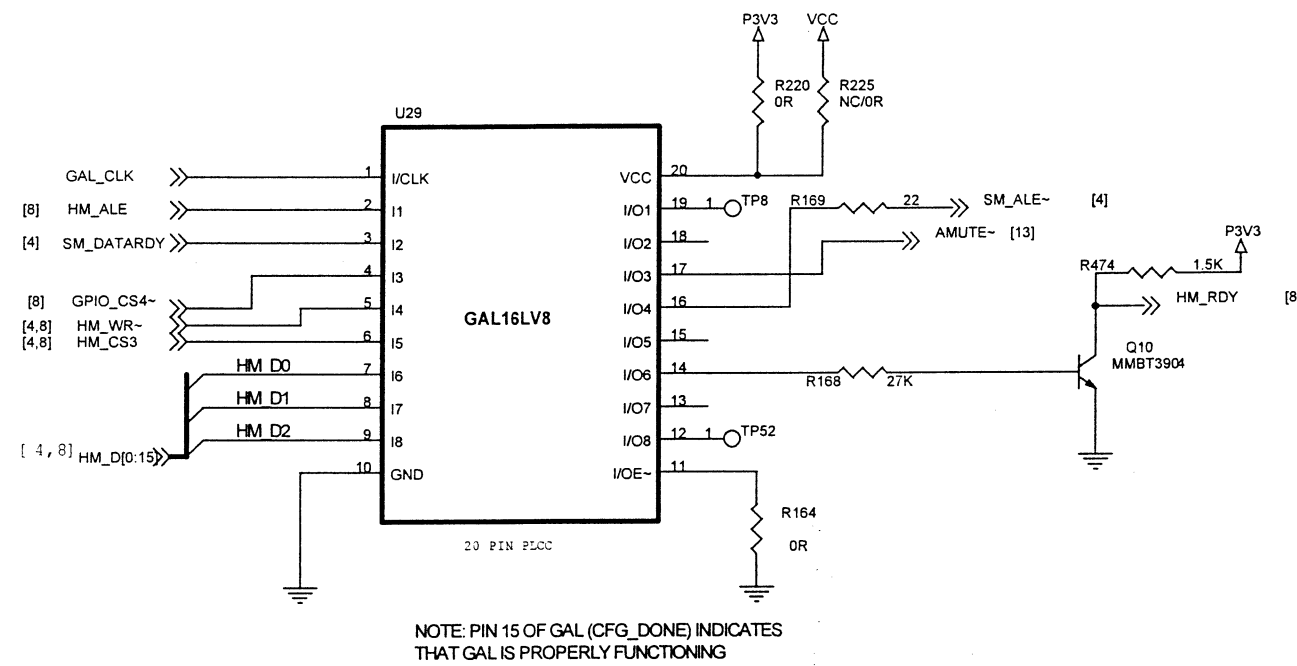
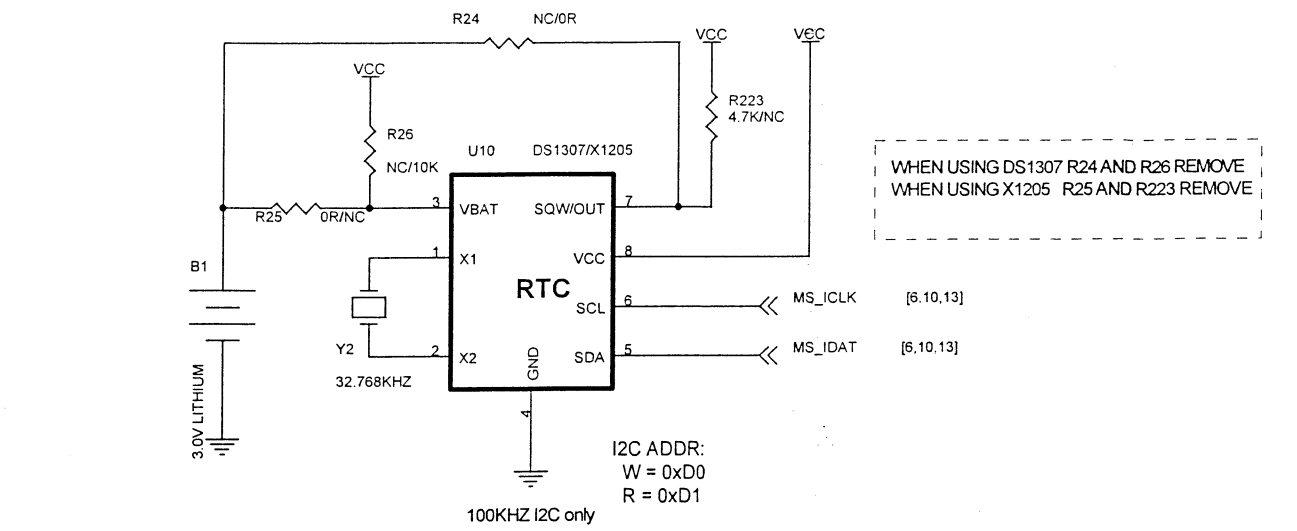




PRELIMINARY



PRELIMINARY



PRELIMINARY

CONFIDENTIAL

PRELIMINARY

A

B

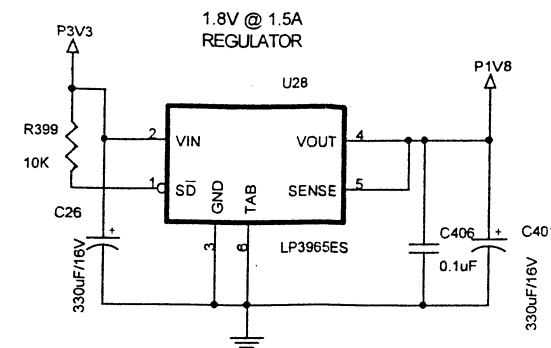
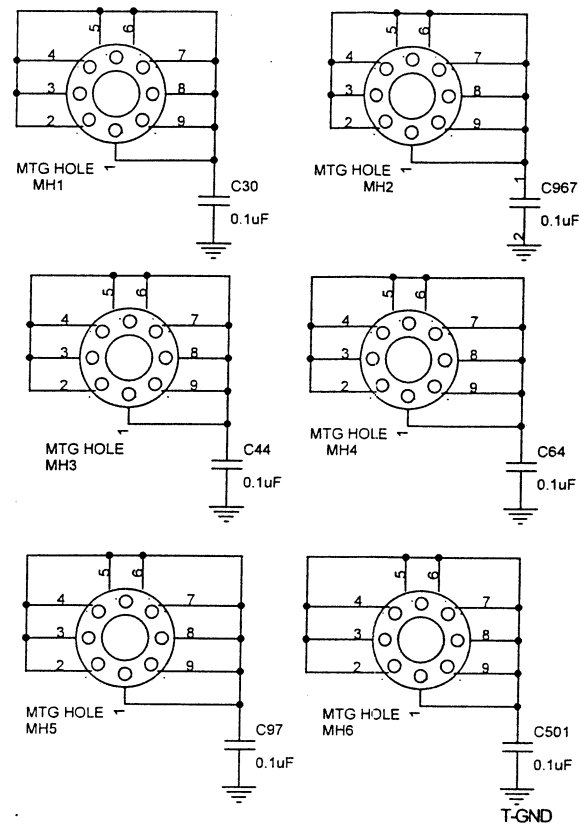
C

D

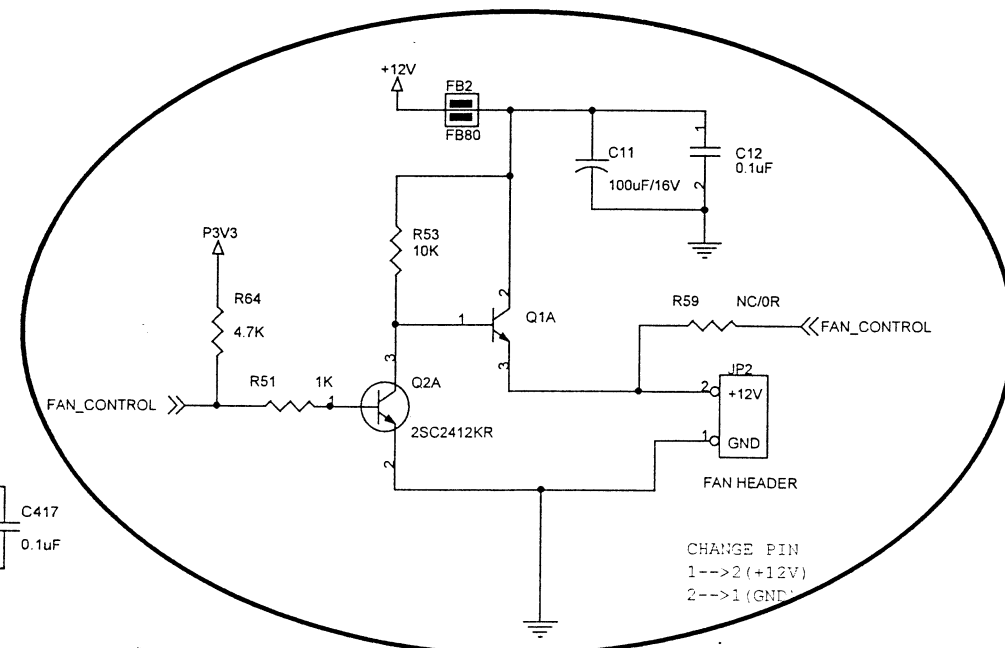
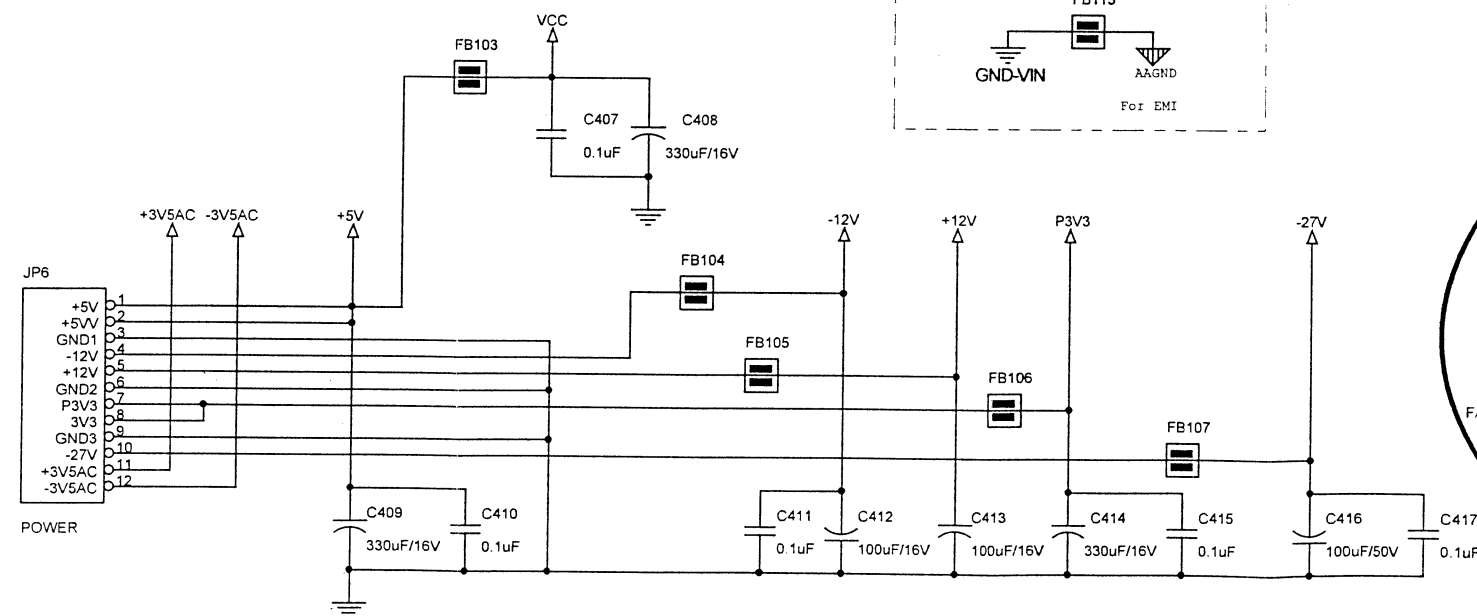
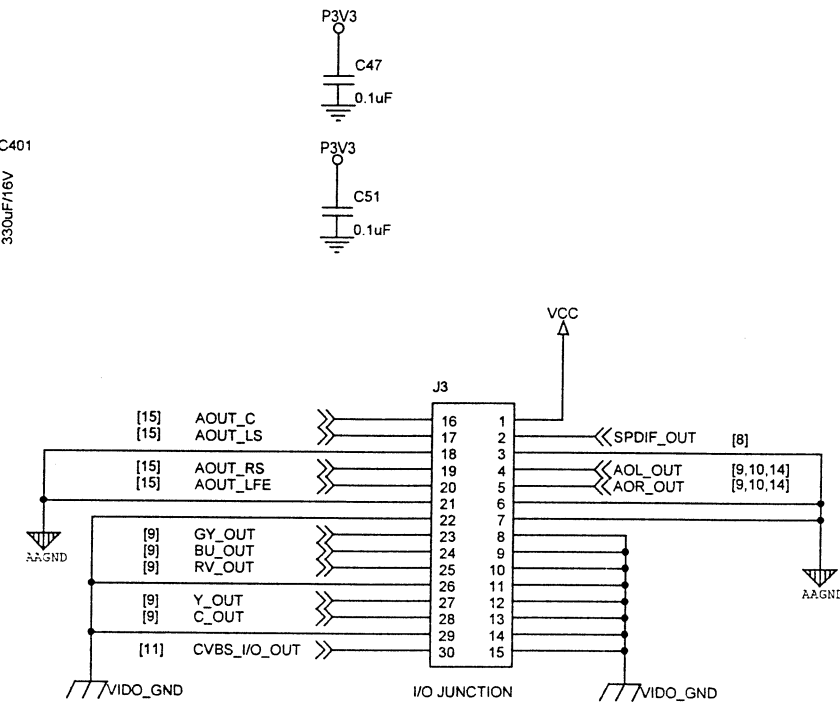
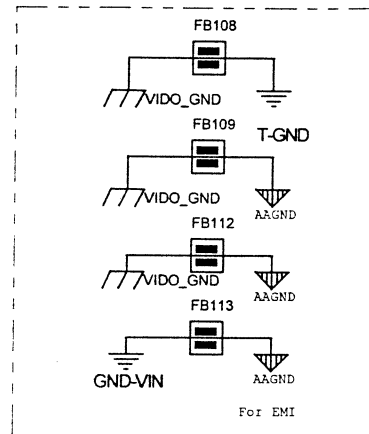
E

CONFIDENTIAL

MOUNTING / TOOLING HOLES



USE SINGLE POINT CONNECTION TO QUIET GND.
DO NOT USE ANY VIAS FOR CONNECTIONS.
PROVIDE 1 SQ. IN THERMAL PAD WITH NO
SOLDER MASK.



CHANGE PIN
1-->2 (+12V)
2-->1 (GND)

CONFIDENTIAL

A

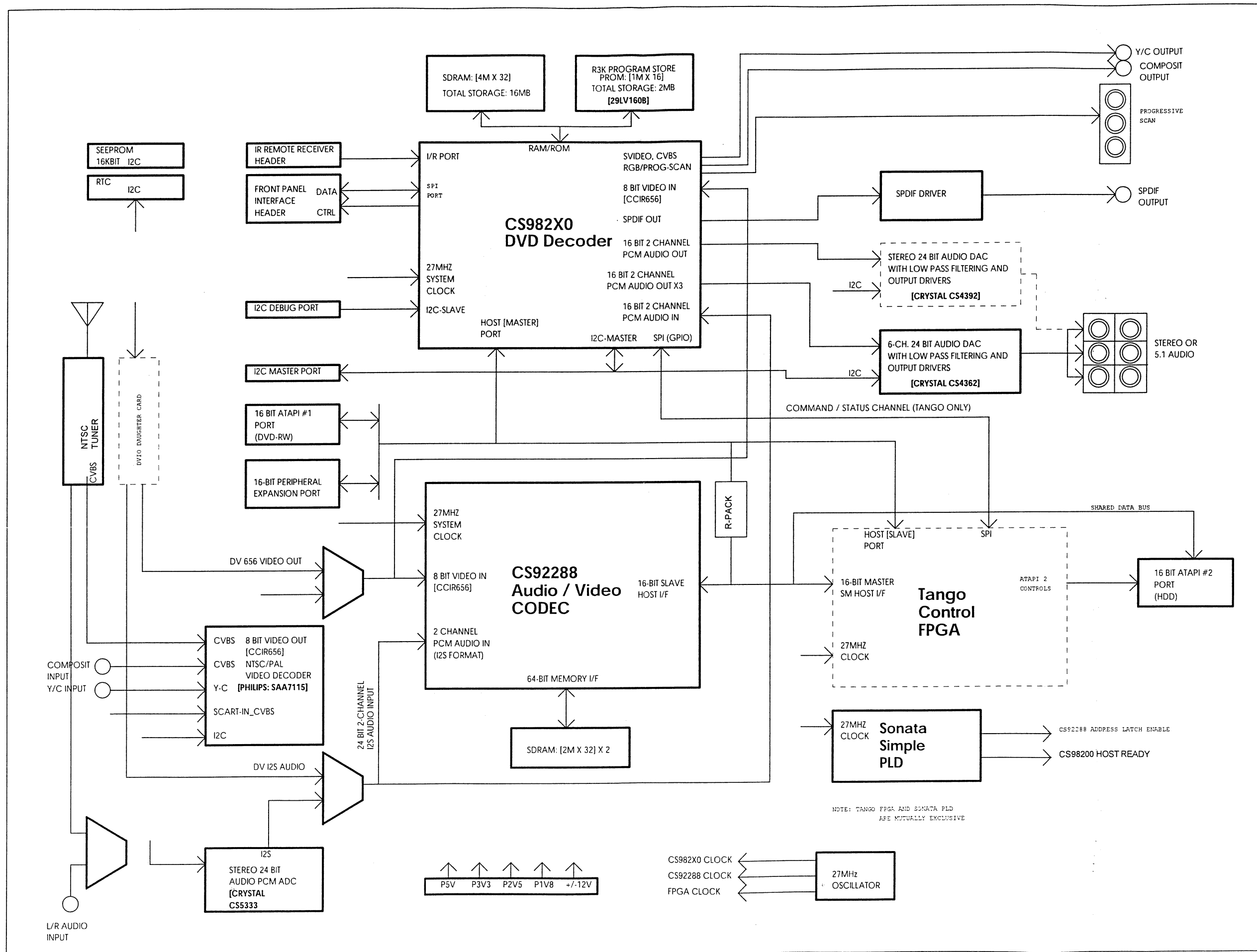
B

C

D

E

PRELIMINARY

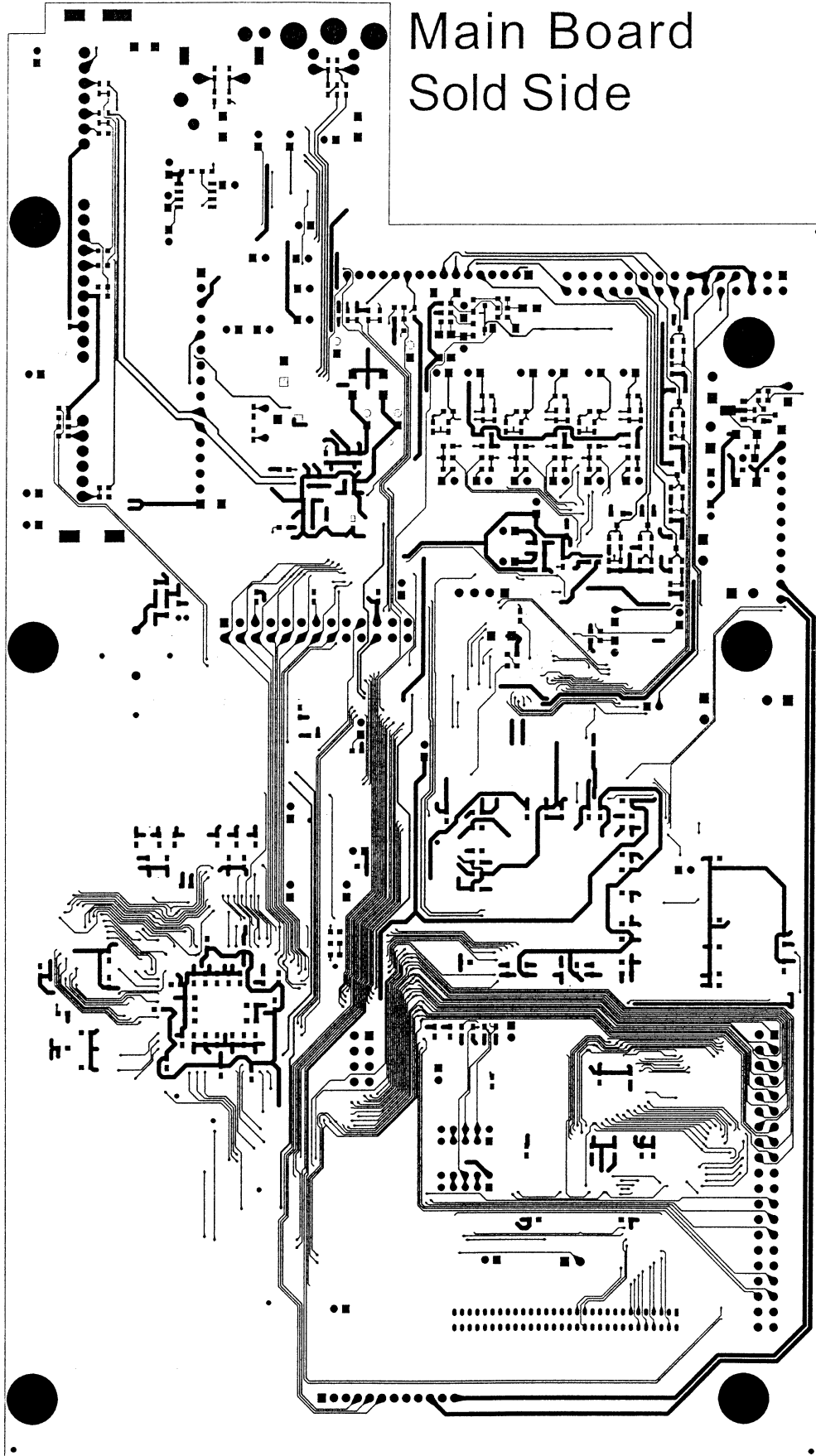


Main Board
Component Side

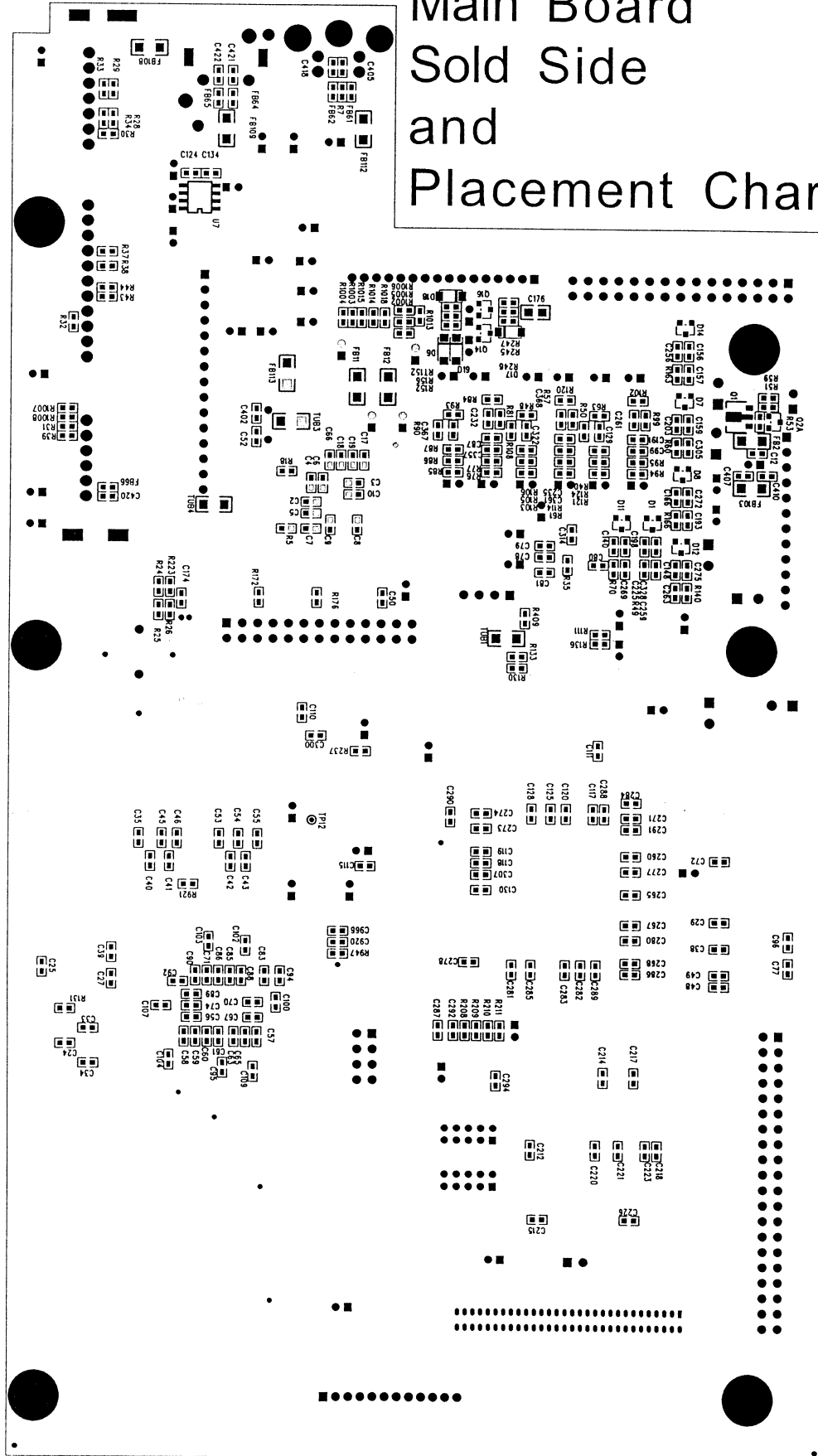
Main Board Component Side and Placement Chart

This diagram illustrates the component side of a main board, showing the placement of various electronic components. The components are labeled with their respective designations, such as resistors (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124, R125, R126, R127, R128, R129, R130, R131, R132, R133, R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161, R162, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R231, R232, R233, R234, R235, R236, R237, R238, R239, R240, R241, R242, R243, R244, R245, R246, R247, R248, R249, R250, R251, R252, R253, R254, R255, R256, R257, R258, R259, R260, R261, R262, R263, R264, R265, R266, R267, R268, R269, R270, R271, R272, R273, R274, R275, R276, R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R296, R297, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R341, R342, R343, R344, R345, R346, R347, R348, R349, R350, R351, R352, R353, R354, R355, R356, R357, R358, R359, R360, R361, R362, R363, R364, R365, R366, R367, R368, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393, R394, R395, R396, R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R422, R423, R424, R425, R426, R427, R428, R429, R430, R431, R432, R433, R434, R435, R436, R437, R438, R439, R440, R441, R442, R443, R444, R445, R446, R447, R448, R449, R450, R451, R452, R453, R454, R455, R456, R457, R458, R459, R460, R461, R462, R463, R464, R465, R466, R467, R468, R469, R470, R471, R472, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490, R491, R492, R493, R494, R495, R496, R497, R498, R499, R500, R501, R502, R503, R504, R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515, R516, R517, R518, R519, R520, R521, R522, R523, R524, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R536, R537, R538, R539, R540, R541, R542, R543, R544, R545, R546, R547, R548, R549, R550, R551, R552, R553, R554, R555, R556, R557, R558, R559, R560, R561, R562, R563, R564, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R583, R584, R585, R586, R587, R588, R589, R590, R591, R592, R593, R594, R595, R596, R597, R598, R599, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660, R661, R662, R663, R664, R665, R666, R667, R668, R669, R670, R671, R672, R673, R674, R675, R676, R677, R678, R679, R680, R681, R682, R683, R684, R685, R686, R687, R688, R689, R690, R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R749, R750, R751, R752, R753, R754, R755, R756, R757, R758, R759, R760, R761, R762, R763, R764, R765, R766, R767, R768, R769, R770, R771, R772, R773, R774, R775, R776, R777, R778, R779, R780, R781, R782, R783, R784, R785, R786, R787, R788, R789, R790, R791, R792, R793, R794, R795, R796, R797, R798, R799, R800, R801, R802, R803, R804, R805, R806, R807, R808, R809, R810, R811, R812, R813, R814, R815, R816, R817, R818, R819, R820, R821, R822, R823, R824, R825, R826, R827, R828, R829,

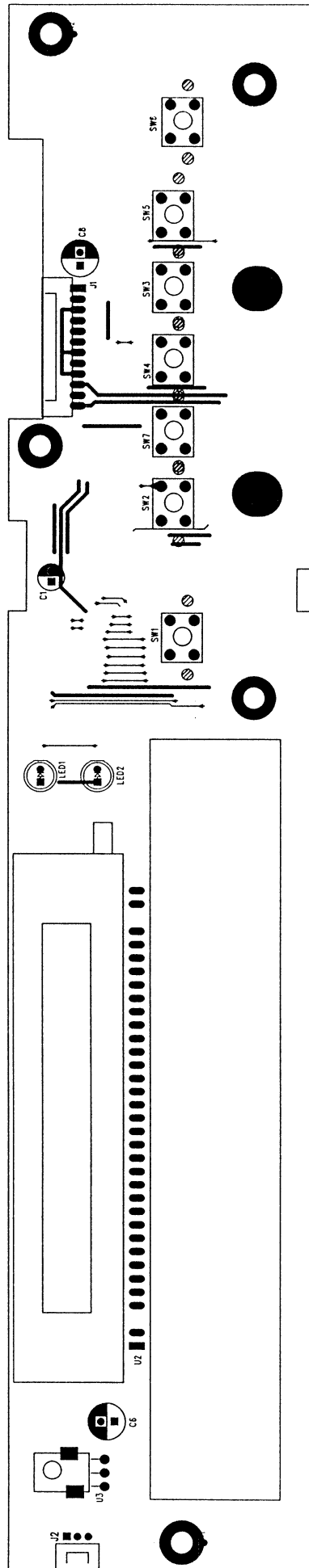
Main Board Sold Side

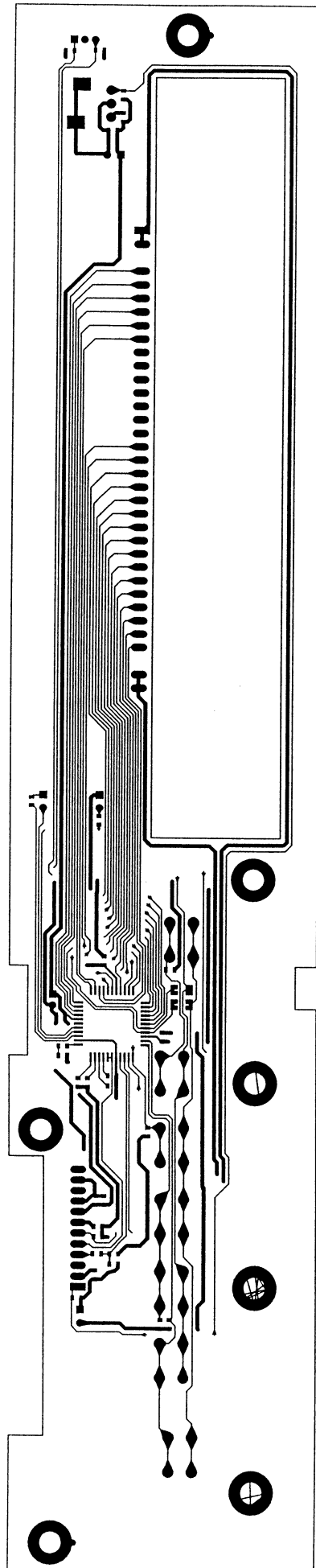


Main Board Sold Side and Placement Chart

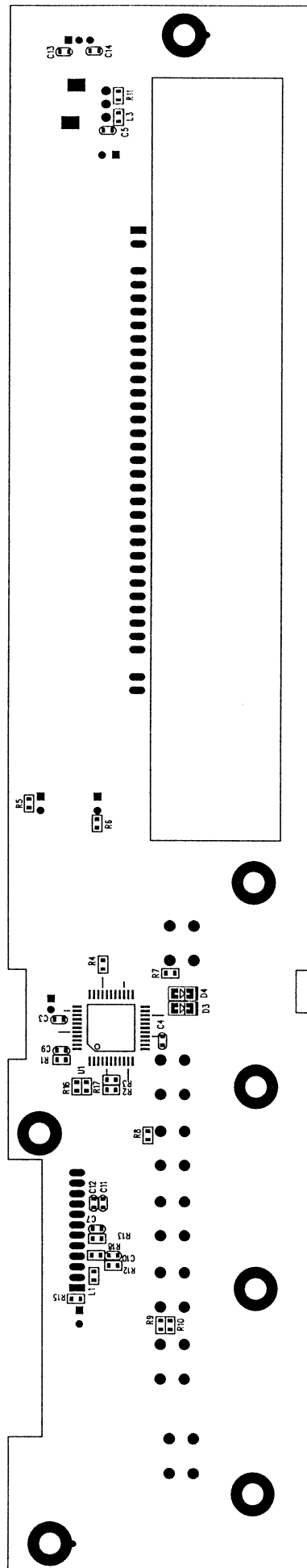


Front Board Component Sid

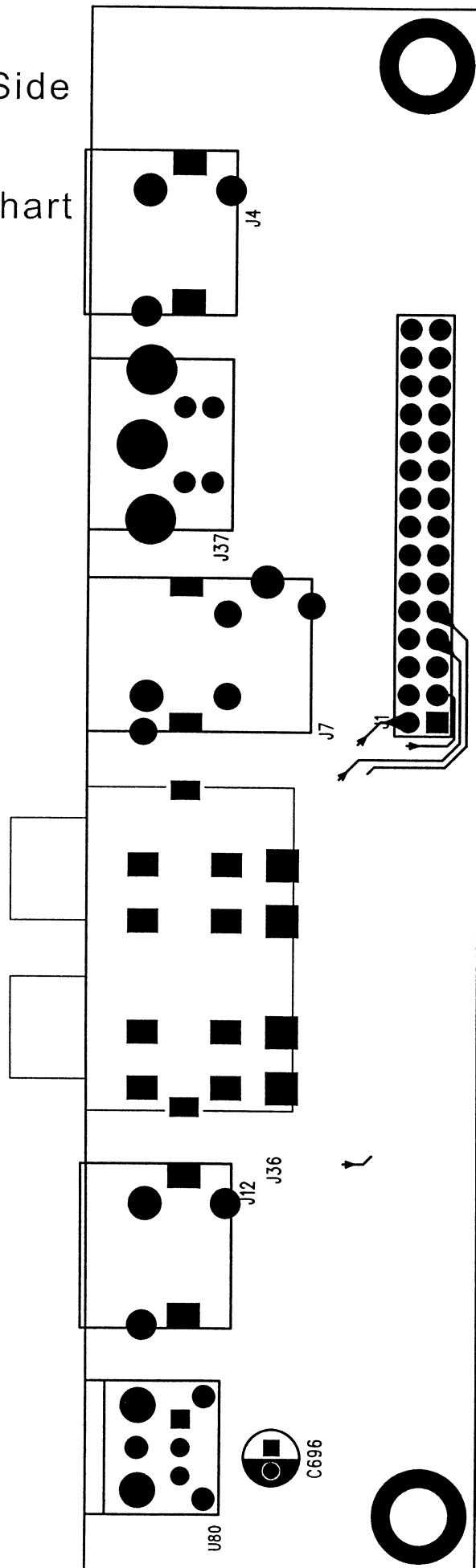




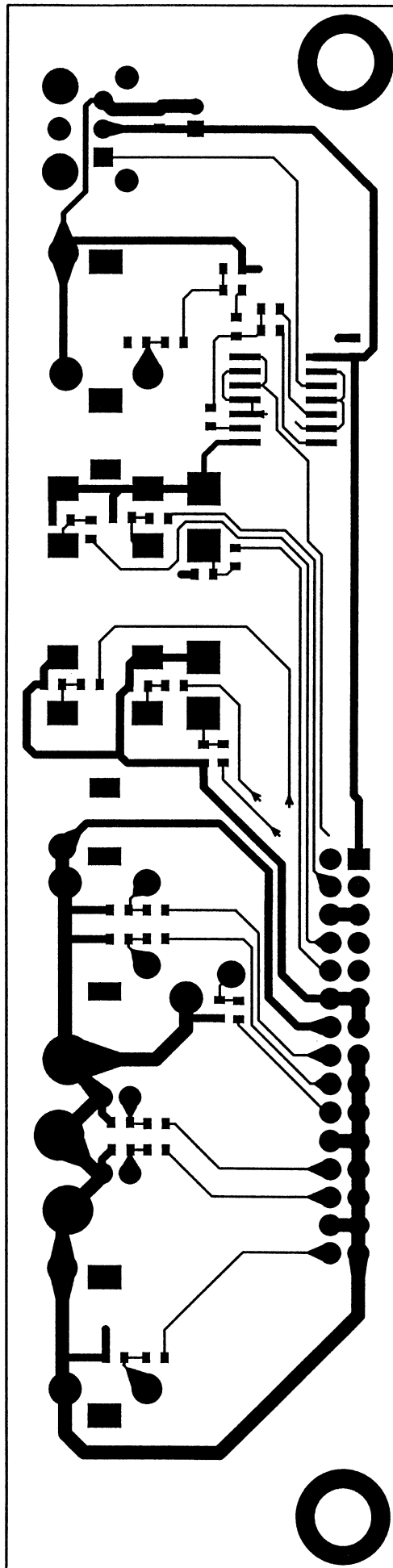
Front Board
Sold Side



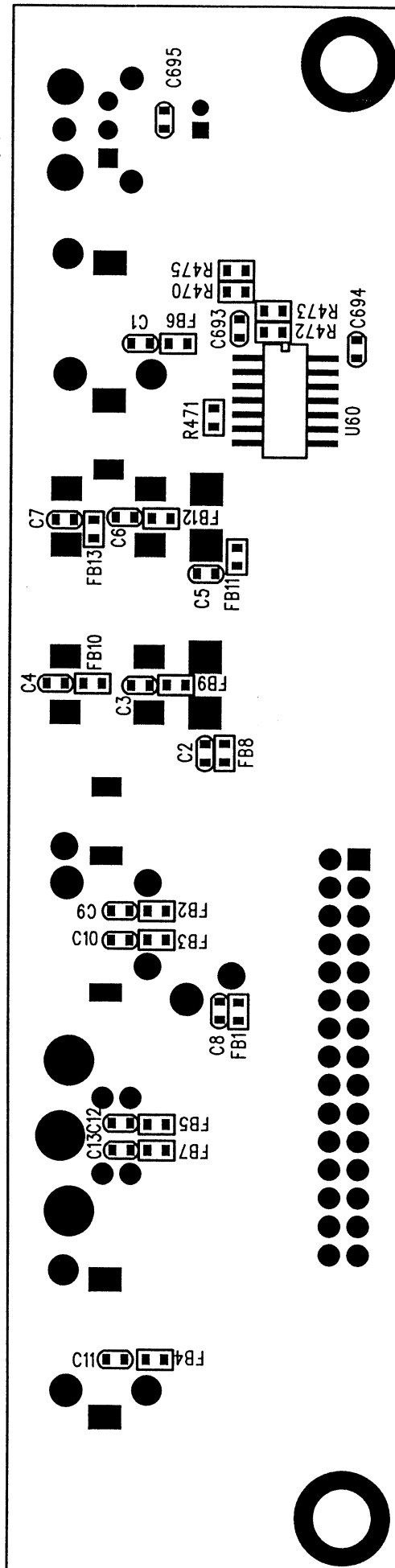
I/O Board Component Side and Placement Chart



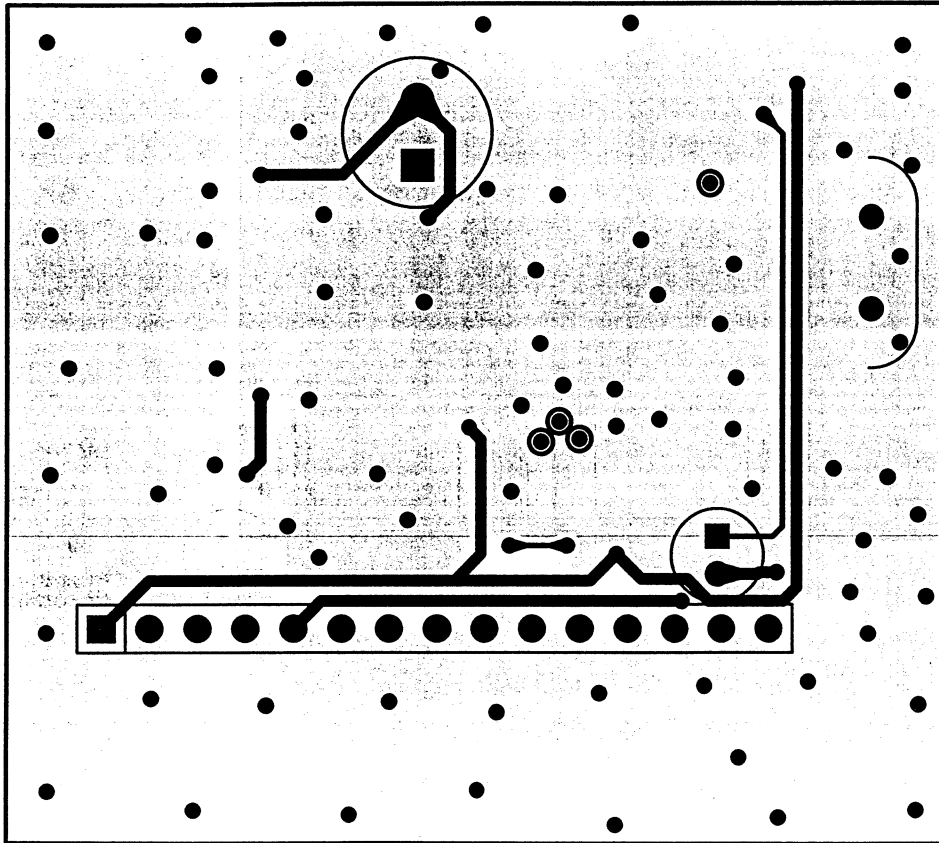
I/O Board
Solder Side



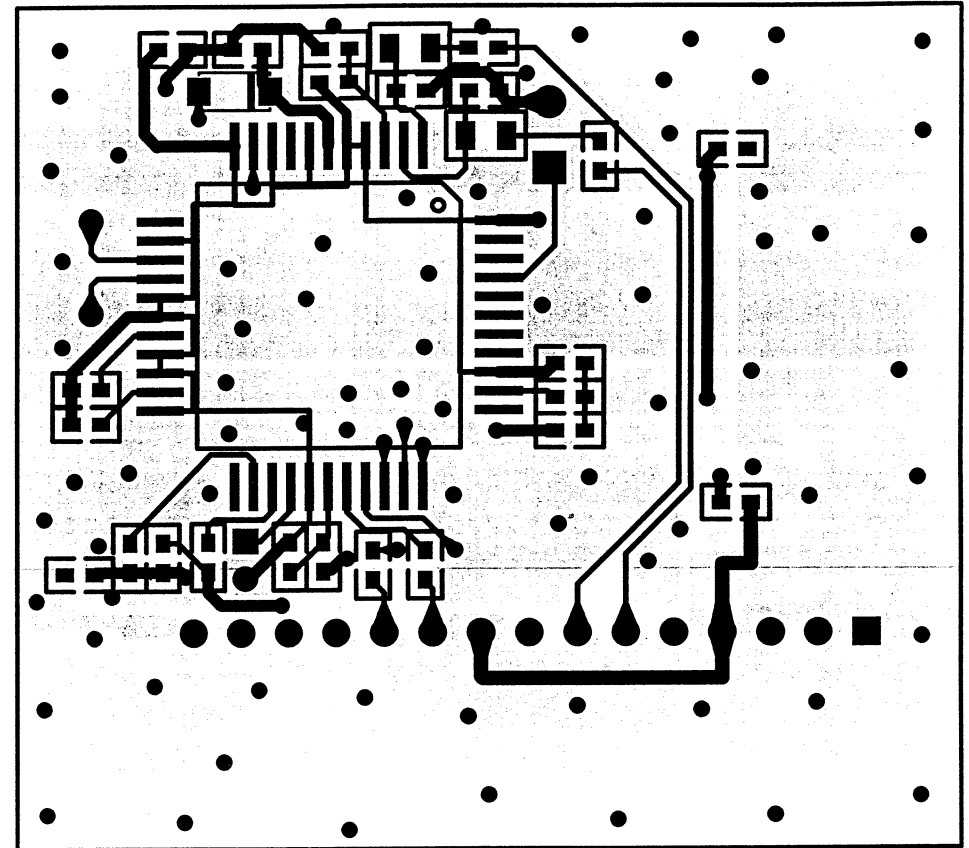
I/O Board Solder Side Placement Chart



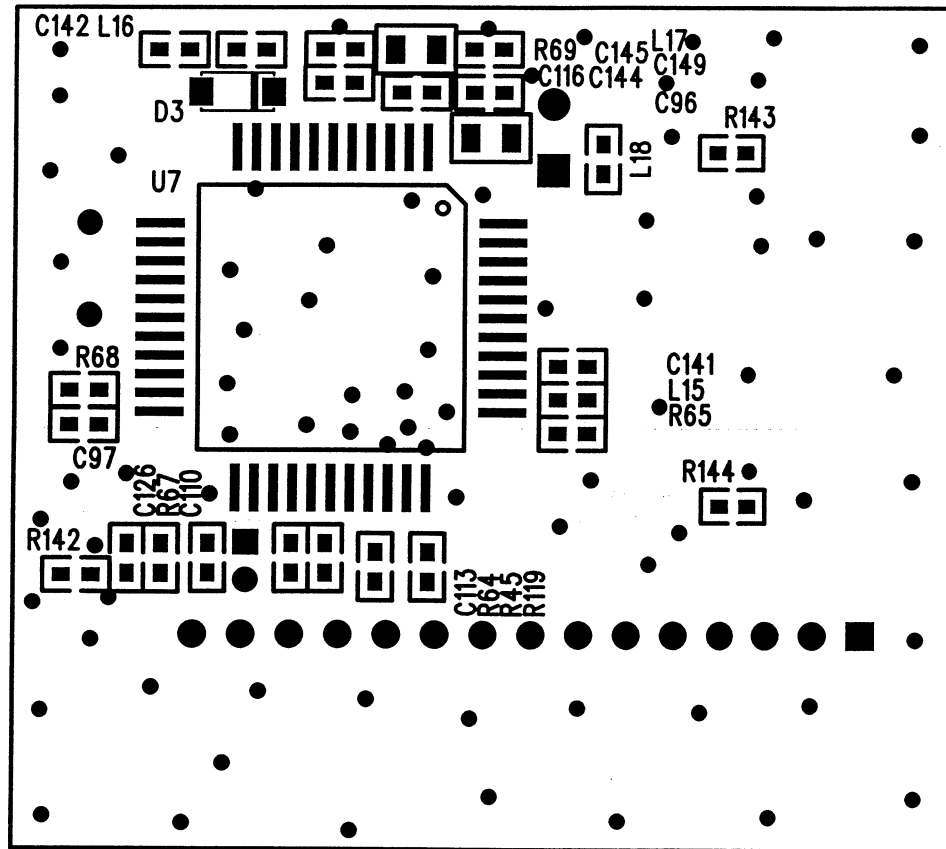
Stereo Decode Board
Component Side



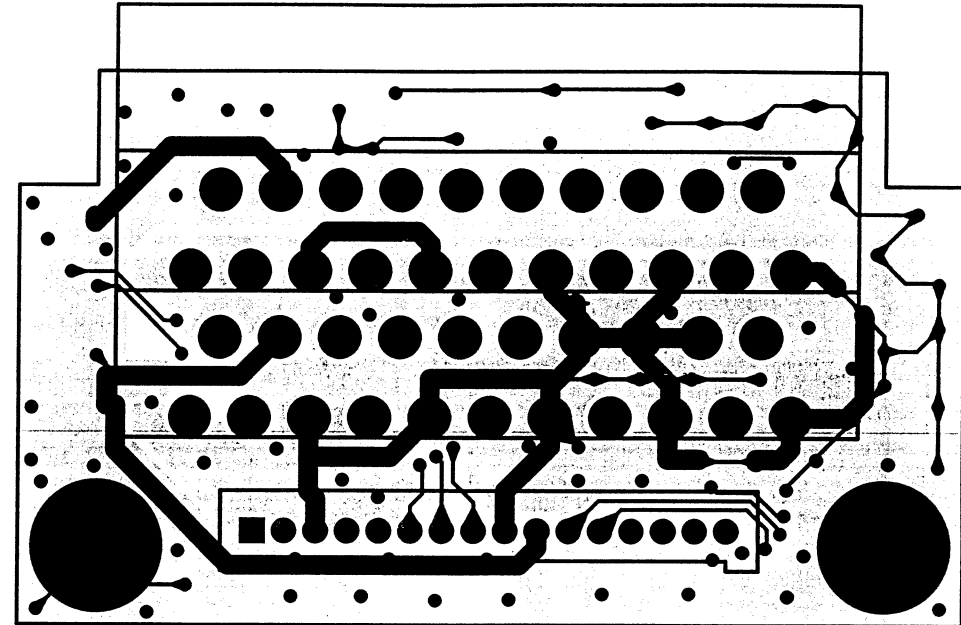
Stereo Decode Board
Solder Side



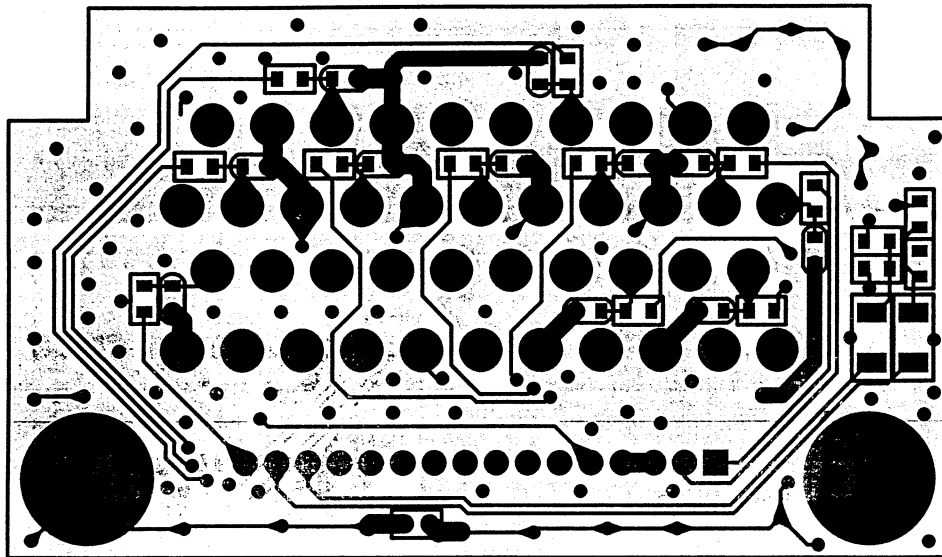
Stereo Decode Board
Solder Side
Placement Chart



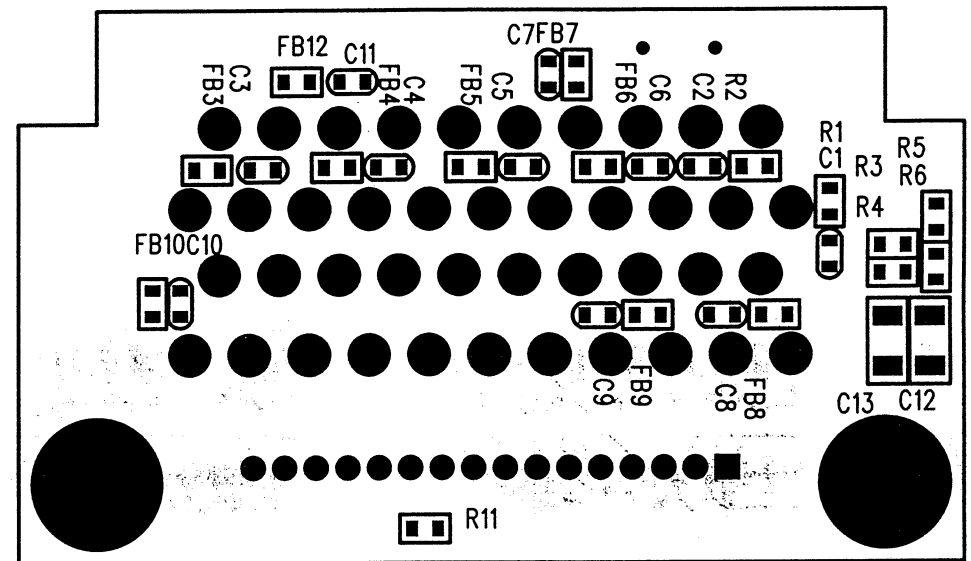
Scart Board
Component Side
and
Placement Chart



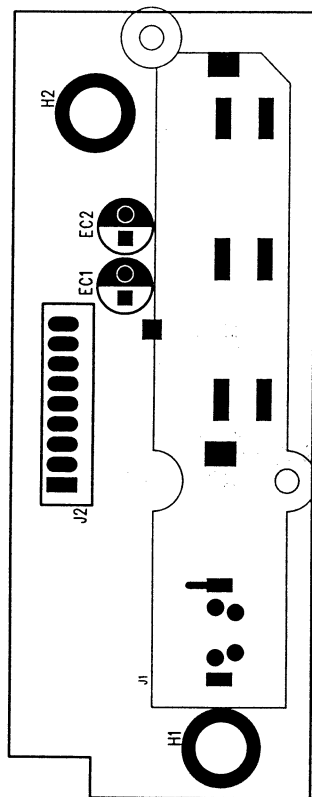
Scart Board
Solder Side



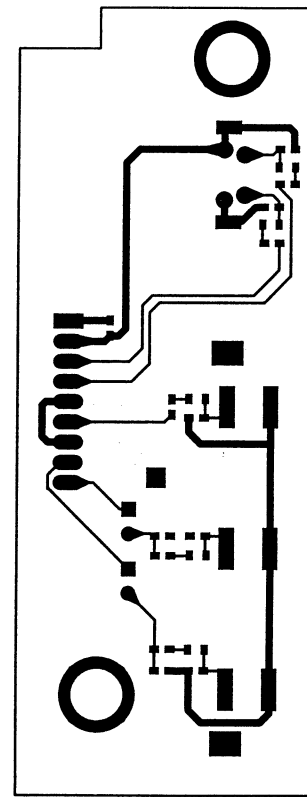
Scart Board
Solder Side
Placement Chart



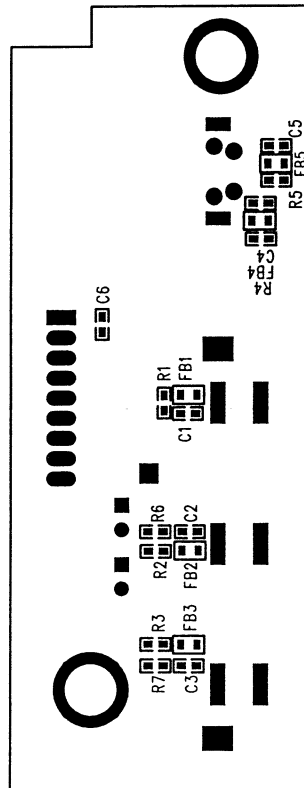
AV-IN Board Component Side and Placement Chart



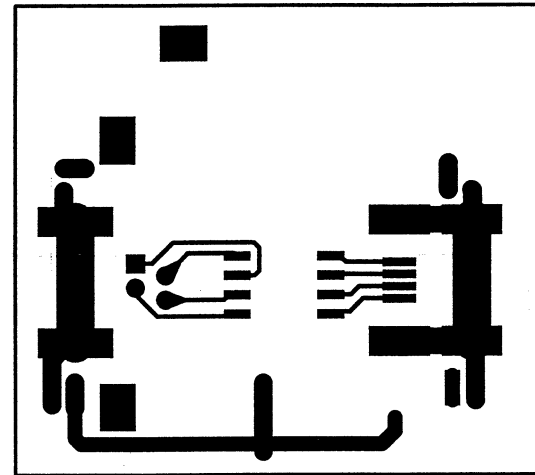
AV-IN Board Solder Side



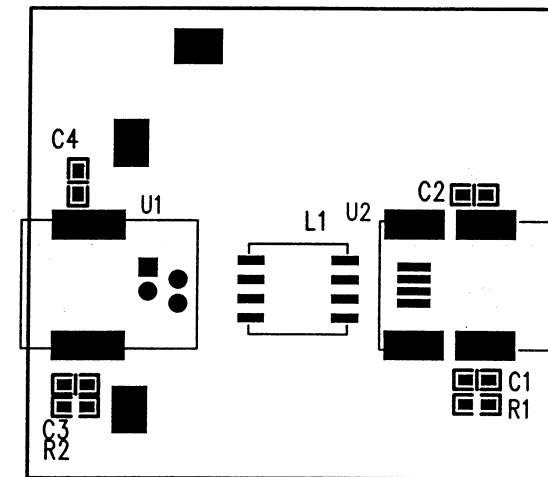
AV-IN Board
Solder Side
Placement Chart



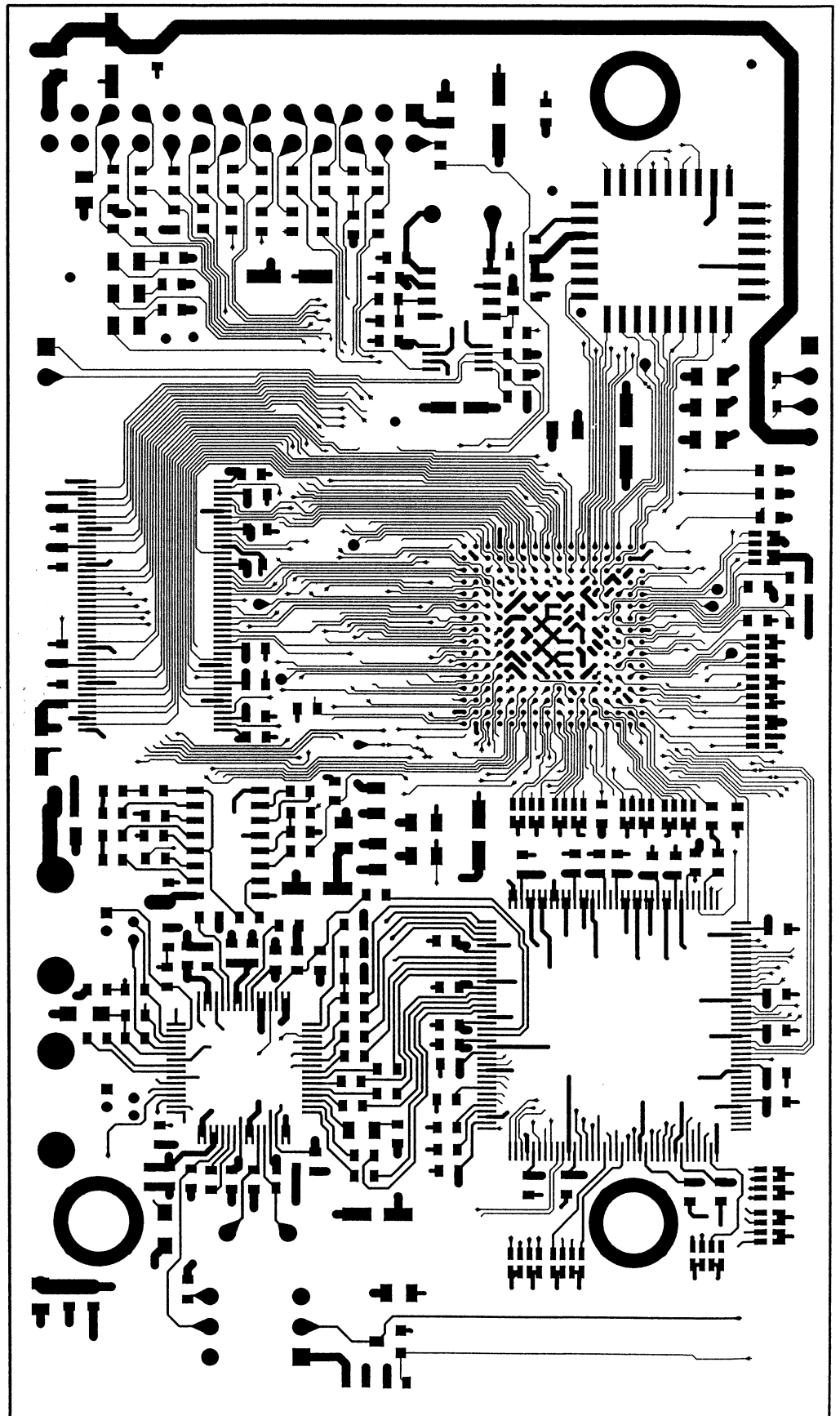
DV-IN Board
Component Side



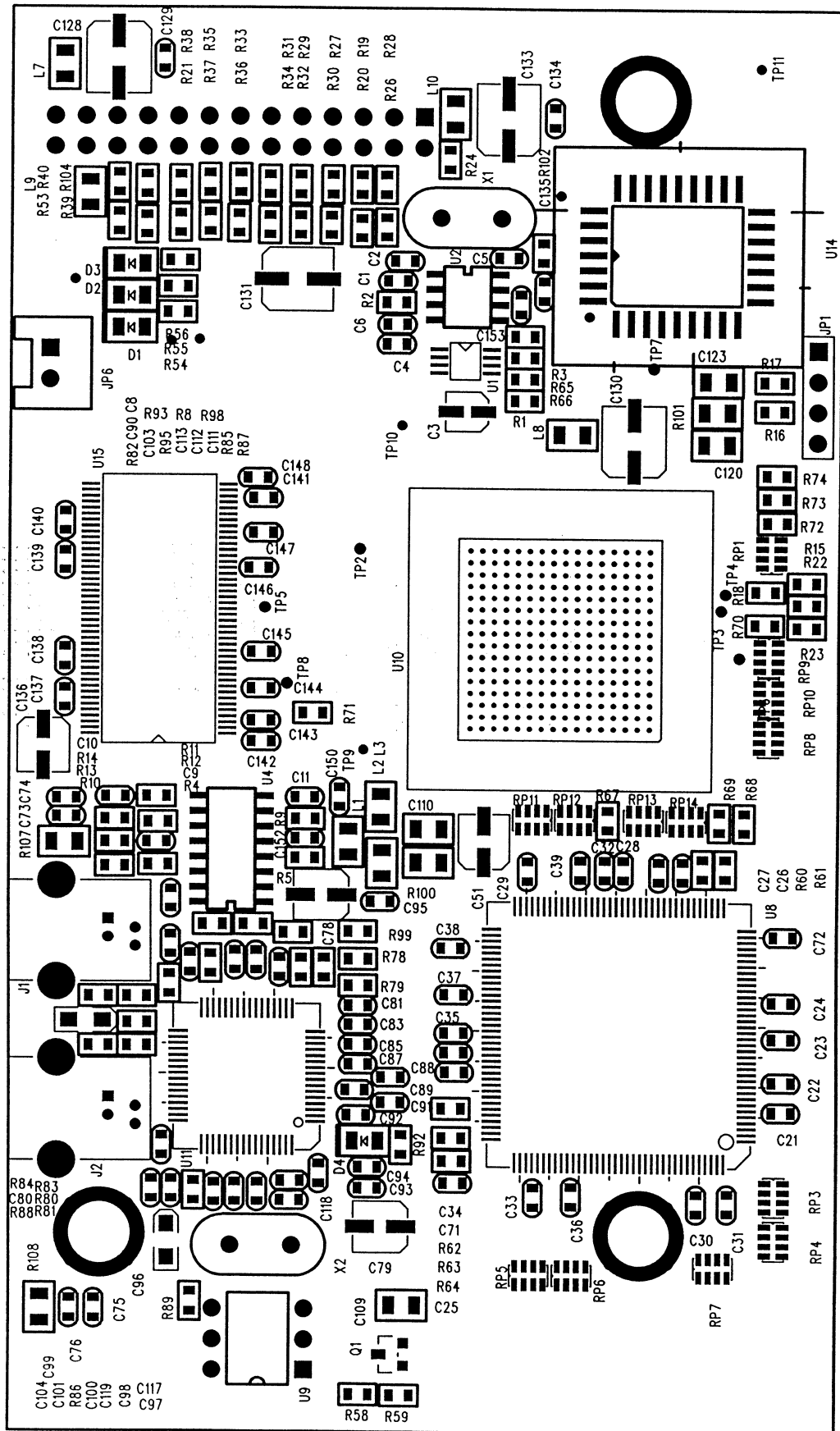
DV-IN Board
Component Side
and
Placement Chart



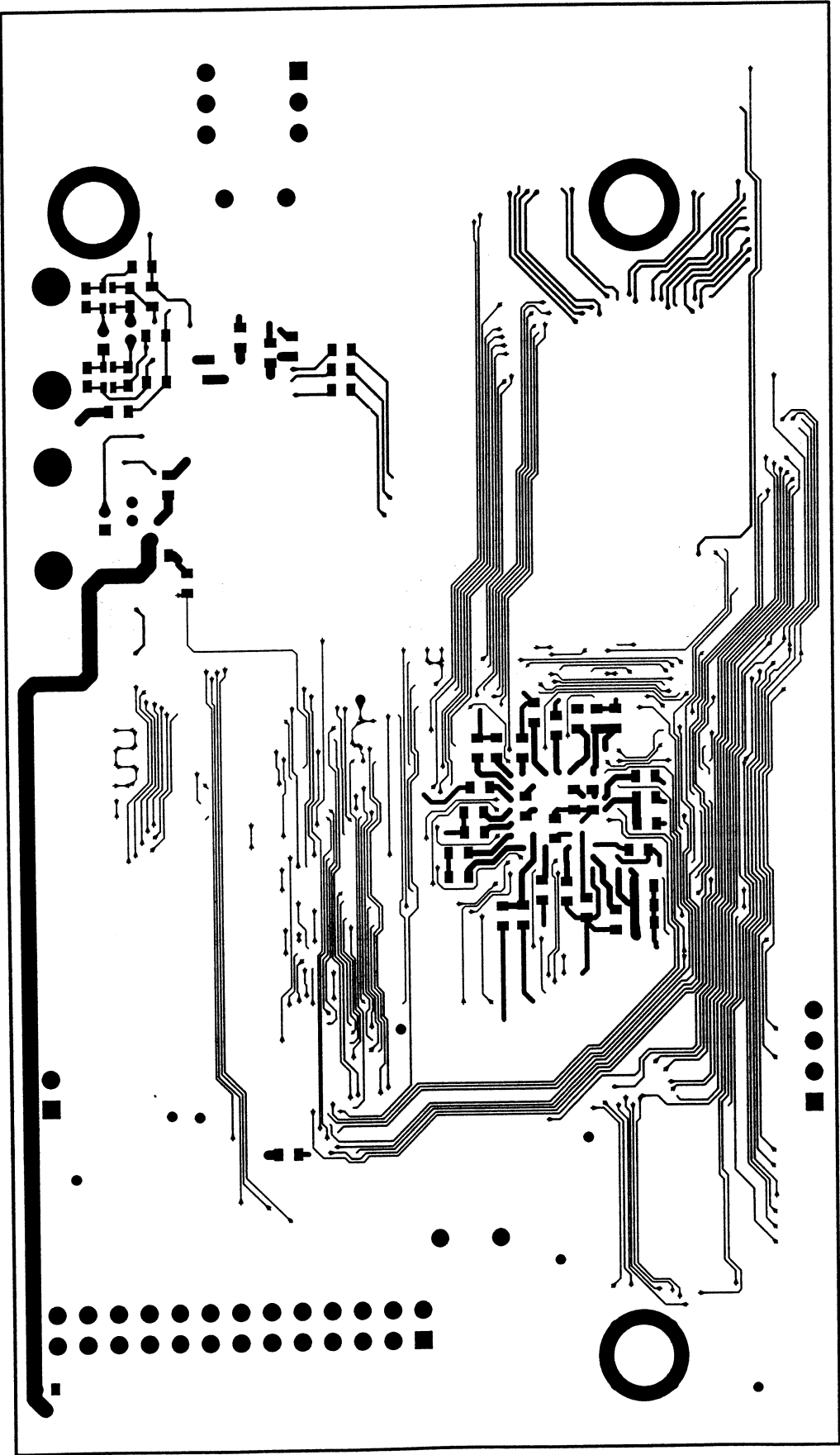
DV Board Component Side



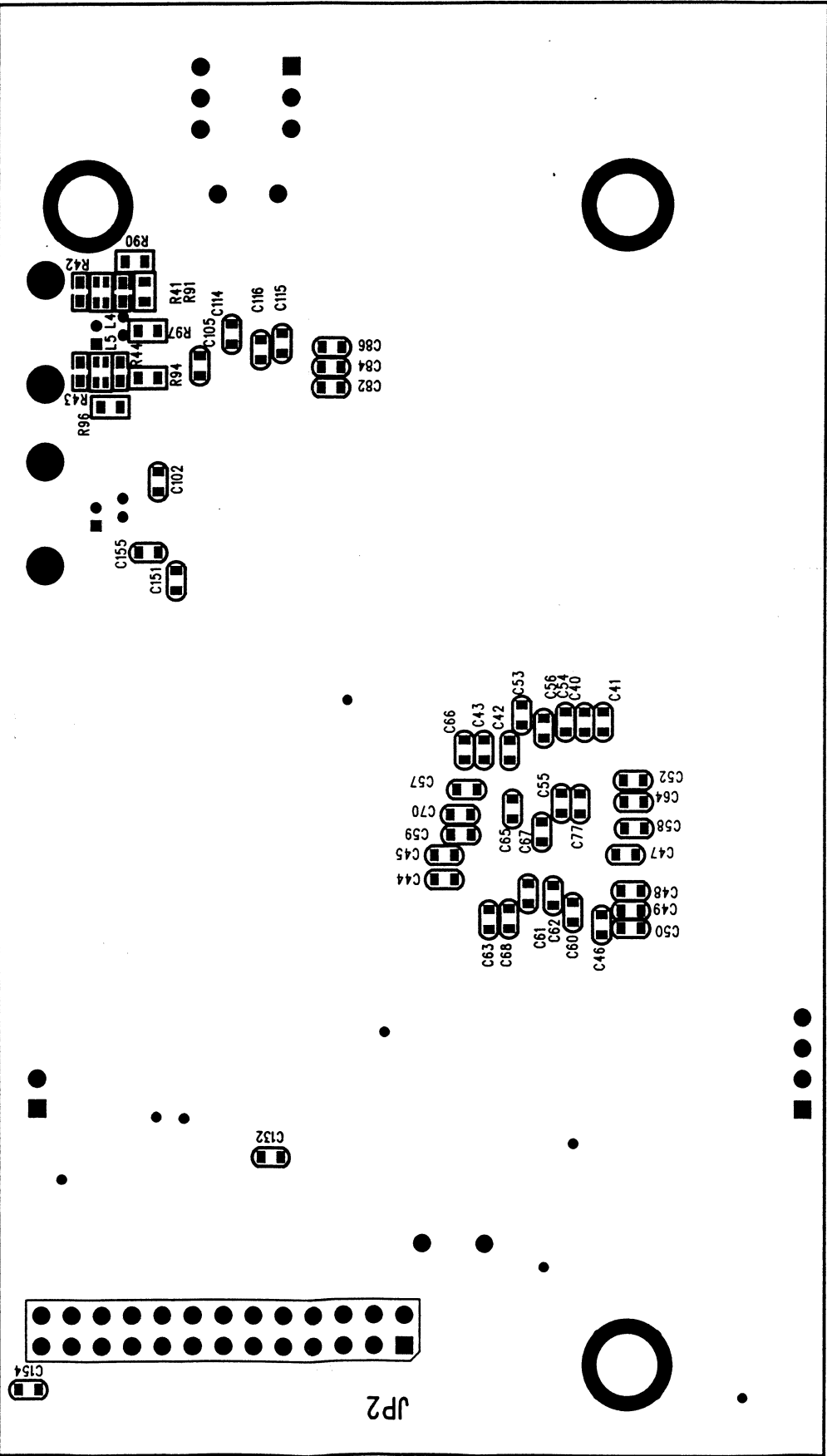
DV Board Component Side and Placement Chart



DV Board
Solder Side

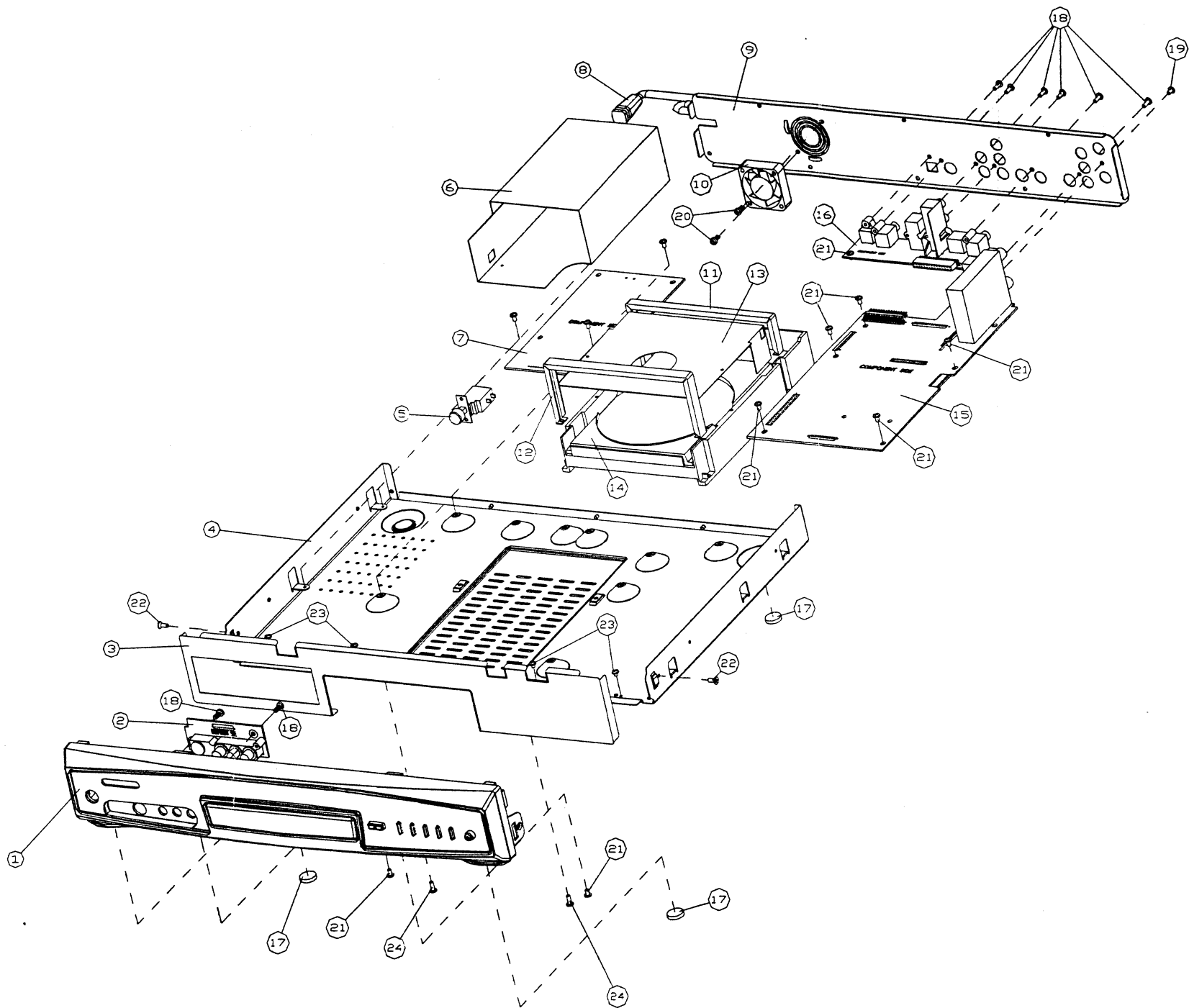


DV Board
Solder Side
and
Placement Chart



K J I H G F E D C B A

1
2
3
4
5
6
7



24	64-300-82BN1	SCREW,M3*8MFNI-3	4
23	64-300-32BN1	SCREW,M3*3,MFNI-3	4
22	64-300-62FN1	SCREW,M3*6,FLAT,MFNI-3	2
21	64-300-52BN1	SCREW,M3*5,MFNI-3	18
20	64-300-92BB1	SCREW,M3*9,BRACK1	2
19	64-300-52BB1	SCREW,M3*5,BRACK1	1
18	64-300-82BB1	SCREW,M3*8,BLACK1	8
17	60-83C-12010	FOOT,RUBBER,PARADIGM-I	4
16	90-128-14000	PCBA,OUTPUT BOARD,2CH,R100	1
15	90-128-26003	PCBA,NTSC,2CH,N-DV,R100B,GOVIDED	1
14	92-128-05010	ASS'Y RICDH-MP5125A,R100	1
13	60-128-P0102	MYLAR,DVD+RW,R100	1
12	60-128-C2901	FRONT BRACKET,R100	1
11	60-128-C3001	BACK BRACKET,R100	1
10	49-620-00031	FAN&CABLE,R100	1
9	60-128-C1008	BACK COVER,US,R100-2,GOVIDED	1
8	54-418-00012	POWER CODE,P/S,N-INLET,US	1
7	90-128-04000	PCBA,P/S,100-240V,R100	1
6	60-128-P0101	MYLAR,R100	1
5	60-48C-59040	POWER,BUTTON,F2,MP0210,R100	1
4	60-128-C1101	BOTTOM,R100	1
3	60-128-C9301	GROUND BOX,F11,R100B	1
2	90-128-22000	PCBA,AV-IN,R100B	1
1	92-128-16040	ASS'Y FRONT PANEL,F5,R100B	1
ITEM	PART NO	PART NAME	Q'ty

COMMON TOLERANCE			
DIM	CLASS	A	B C
0<L<3		H0.05	H0.1 H0.2
3<L<6		H0.05	H0.1 H0.2
6<L<16		H0.1	H0.15 H0.3
16<L<30		H0.1	H0.2 H0.5
30<L<120		H0.15	H0.3 H0.8
120<L<315		H0.2	H0.5 H1.0
315<L<1000		H0.5	H0.8 H2.0
1000<L<2000		H1.0	H2.0 H3.0

Fig-1. Housing

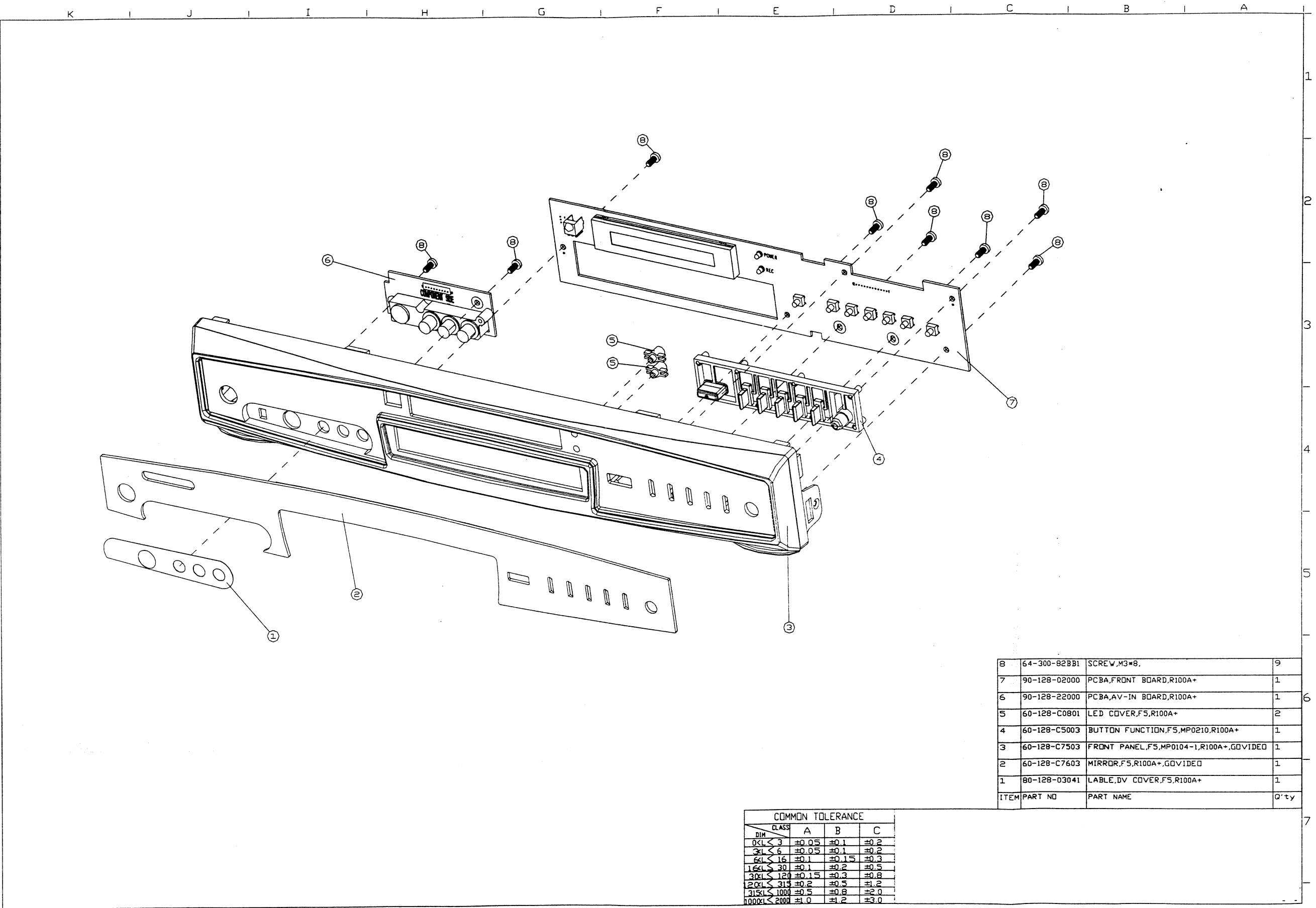
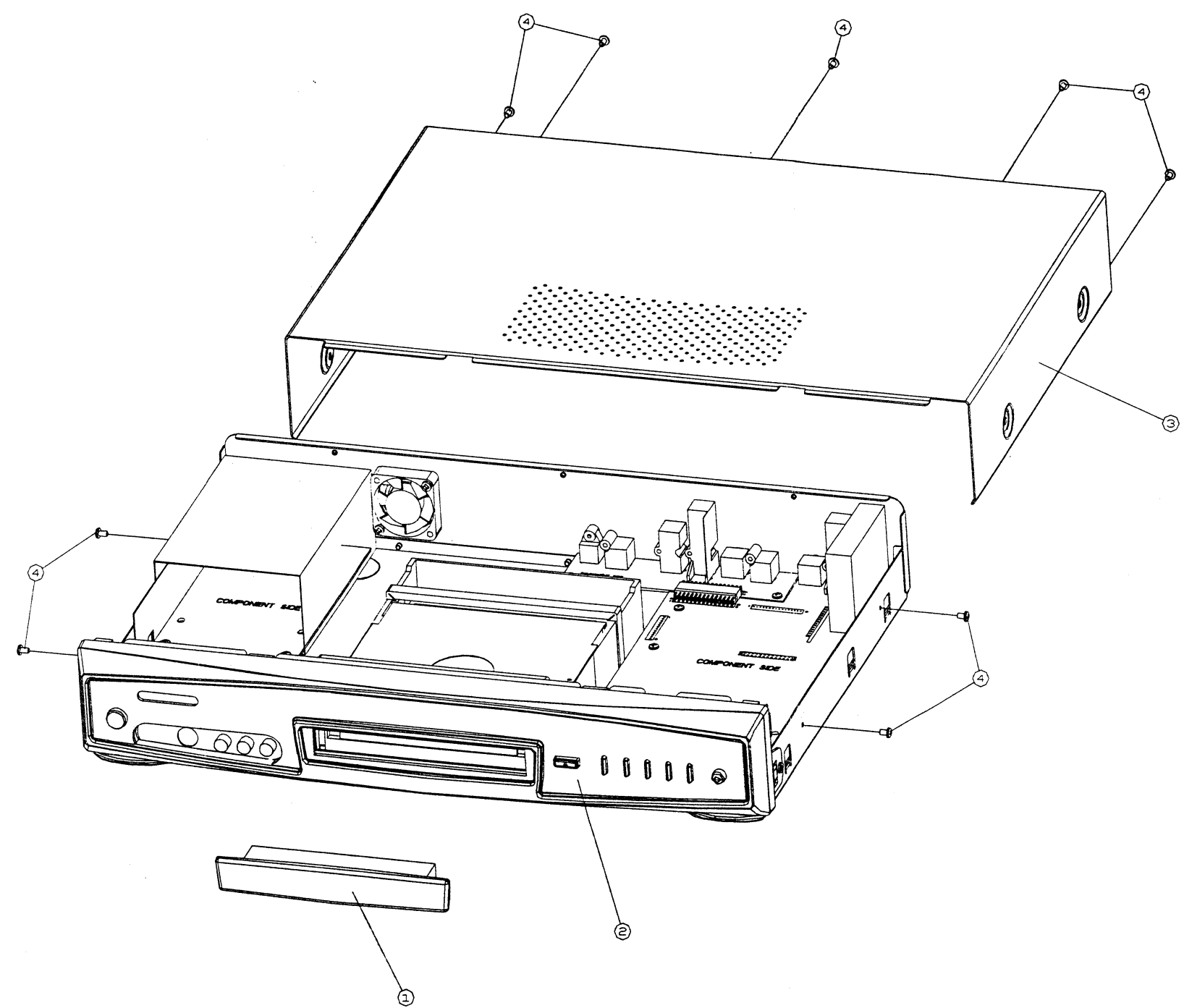


Fig-1 ASS'Y FRONT PANEL

K | J | I | H | G | F | E | D | C | B | A

1
2
3
4
5
6
7



4	64-300-52BN1	SCREW,M3*5,MFNI-3	9
3	60-128-C5602	TOP COVER,F5,MP0104-1,R100	1
2	90-128-15070	HSG,R100A+2,F5,US,GDVIED	1
1	60-128-C3601	TRAY COVER,F5,MP0104-1,R100	1
ITEM	PART NO	PART NAME	Q'ty

COMMON TOLERANCE				
CLASS	A	B	C	
0<L<3	±0.05	±0.1	±0.2	
3<L<6	±0.05	±0.1	±0.2	
6<L<16	±0.1	±0.15	±0.3	
16<L<30	±0.1	±0.2	±0.5	
30<L<120	±0.15	±0.3	±0.8	
120<L<315	±0.2	±0.5	±1.2	
315<L<1000	±0.5	±0.8	±2.0	
1000<L<2000	±1.0	±1.2	±3.0	

Fig-1. ENG